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Argumentation: The Study of Effective Reasoning, 2nd Edition

Course Guidebook

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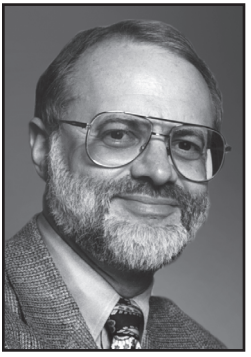

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David Zarefsky received his B.S. (with highest distinction) from Northwestern University and earned his master's and doctoral degrees also from Northwestern. He has taught at Northwestern for more than 30 years. From 1988 through 2000, he was dean of the School of Speech. Currently, he is Owen L. Coon Professor of Argumentation and Debate and Professor of Communication Studies.

Dr. Zarefsky has served as president of the National Communication Association (NCA), one of the nation's oldest and largest professional organizations for scholars, teachers, and practitioners in communication and performance studies. He also has been president of the Rhetoric Society of America (RSA), an interdisciplinary society of scholars interested in studying public discourse. He has held a number of other leadership positions in NCA and other professional associations and is a former editor of the journal *Argumentation and Advocacy*.

A prolific writer, Dr. Zarefsky has written five books and edited three more and has an impressive list of scholarly articles and reviews to his credit. He received the 1986 NCA Winans-Wichelns Award for Distinguished Scholarship in Rhetoric and Public Address for his book *President Johnson's War on Poverty: Rhetoric and History*. He won the same award in 1991 for *Lincoln, Douglas, and Slavery: In the Crucible of Public Debate*. He is one of only three people to have received this prestigious award twice.

A nationally recognized authority on rhetoric, argumentation, and forensics, Dr. Zarefsky maintains a busy schedule as a member of external review committees for departments of communication studies, as well as of speech communication, at various universities. At Northwestern, Dr. Zarefsky

teaches undergraduate and graduate courses in the history of American public discourse, argumentation theory and practice, and rhetorical analysis and criticism. He has been elected to Northwestern University's Associated Student Government Honor Roll for Teaching on 13 occasions. ■

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Argumentation: The Study of Effective Reasoning, 2nd Edition

Scope:

This series of 24 lectures examines a common but understudied aspect of human communication: argumentation. Far from the stereotypes of contentiousness or quarrelsomeness, argumentation is the study of reasons given by people to justify their acts or beliefs and to influence the thought or action of others. It is concerned with communication that seeks to persuade others through reasoned judgment. The course is introductory in that it does not presume any prior study of argumentation. Because all of us practice argumentation, however, the course is also sophisticated in that it offers a systematic analysis, a precise vocabulary, and a philosophical foundation for what all too often is an activity that we conduct intuitively and unconsciously.

The first four lectures provide the necessary intellectual background. Lecture 1 defines argumentation and situates it among a family of terms: *rhetoric, logic,* and *dialectic*. Unfortunately, these terms either have acquired negative stereotypes in contemporary culture or they have fallen into disuse; therefore, it is necessary to understand them in their classical context. Each term is defined, and the terms are related to one another. Lecture 2 then identifies a series of assumptions that undergird the practice of argumentation: the importance of an audience, the regulation of uncertainty, the difference between justification and proof, the cooperative nature of the enterprise, and the acceptance of risk. These assumptions provide the philosophical base for understanding what it means to argue as a means of reaching decisions.

Much of the contemporary revival of argumentation has emphasized its informal character and, hence, the inapplicability of formal logic as a model. Lecture 3 thus is devoted to the differences between formal and informal reasoning. The main patterns of formal deduction—categorical, conditional, and disjunctive reasoning—are described and illustrated. The lecture

identifies the limitations of formal reasoning as a prototype and explains how informal reasoning is fundamentally different.

Although the emphasis on informal reasoning may seem new, it actually has a long tradition, and Lecture 4 surveys, in broad-brush fashion, how the study of argumentation has evolved from classical times to the present. Originally, argumentation was the heart and soul of rhetorical studies, and rhetoric was regarded as one of the seven basic liberal arts. During the intervening centuries, rhetoric was separated from its most intellectual elements, argumentation was taken over by philosophy, and formal logic (especially symbolic or mathematical logic) was regarded as the prototype for all reasoning. The lecture summarizes consequences of these trends and includes a discussion of several late-20th-century efforts to refocus argumentation studies.

The next seven lectures, 5 through 11, examine aspects of argumentation strategies and tactics. Lecture 5 begins this series by considering how controversies arise and how the most basic element of argument is the claim. It then defines the major components of an argument (a claim, evidence, an inference linking the evidence to the claim, and a warrant authorizing the inference) and describes how these components can be represented diagrammatically. Lecture 6 moves from simple arguments to examine the structure of more complex arguments. Multiple, coordinative, and subordinative structures illustrate the patterns by which parts of complex arguments are brought together. We will explore how the choices among these patterns make a difference to the understanding of the overall argument.

The structures exposed in Lecture 6 can be thought of as ways to map an arguer's case, that is, the set of arguments that he or she brings forward to support or oppose a claim. Lecture 7 considers the arguer's responsibility to speak to all the relevant issues in the assembly of the case. This consideration will lead into a discussion of the nature of issues, means of identifying issues in a specific case, and why addressing the issues meets the initial burden of proof. The lecture then shifts from responsibilities to choices and focuses on the arguer's options with respect to selection and arrangement of arguments.

Lectures 8 through 10 concern the processes of attacking and defending arguments, processes that collectively are known as refutation. We begin by considering the key concept of *stasis*. This concept refers to the focal point of the argument, which is created by the confrontation of assertion and denial. The first step in responding to an argument, then, is to identify the desired *stasis*. This lecture explores how different choices about *stasis* affect argument, both in the legal setting in which it was originally devised and in nonlegal arguments as well.

Lecture 9 introduces the processes of attack and defense, pointing out that, despite the military metaphor, these are cooperative activities. Choices regarding the selection of arguments for attack and the development of the attack are considered in some detail. Lecture 10 completes the discussion of attacks, then examines the process of defending and rebuilding arguments, in which the choices available to the advocate are far fewer. The lecture concludes with general techniques of refutation that can be used both by the attack and by the defense.

The treatment of argument strategy and tactics concludes with Lecture 11, which is devoted entirely to the role of language in argument. By considering the role of definitions, figures of speech, precision, and intensity, the lecture establishes that language is integral to argument, not ornamentation that is added to language-free content.

In the next set of seven lectures, Lectures 12 through 18, the focus shifts from argument strategy and tactics to the more microscopic level, in which specific components of the individual argument are the units of analysis, and the goals are to examine how the components are used and which factors of each component may strengthen or undermine the argument in which it is used. A single lecture examines evidence, which is discussed with reference to examples, statistical measures, objective data and historical documents, and testimony. Then six lectures address different kinds of inferences and warrants. These are especially important because they are the most complex parts of the argument and designate different argument schemes. Six different inferential patterns are examined carefully—example, analogy, sign, cause, commonplaces, and form. In each case, the lectures explain

that the inference depends on probability rather than certainty. The basic pattern of the inference is described, its uses are considered, and tests are offered that help to determine whether the inference is likely to be sound. Unlike deductive reasoning, in which the soundness of an argument is a purely formal question, in argumentation the soundness of an inference is governed heavily by context and experience. After presentation of these six basic patterns of inductive inference, several hybrid inferential patterns are considered in Lecture 18—reasoning with rules, reasoning about values, and dissociations.

Because the goal in constructing arguments is to have not only some sort of reasoning structure but one that will influence critical listeners, the appraisal of arguments becomes the focus of Lectures 19 and 20. These lectures offer different approaches to the question, "What makes an argument valid?" Lecture 19 introduces the concept of validity by reference to formal argument, then considers what errors in each of the six informal inference patterns will make an argument invalid, and finally considers general errors of vacuity that result in "empty" arguments. Lecture 20 resumes consideration of general fallacies by considering fallacies of clarity (the use of unclear or equivocal language) and fallacies of relevance (drawing inferences from factors having nothing to do with the relationship between evidence and claim). It then circles back on the concept of fallacy by showing that supposedly fallacious inferences are sometimes valid, depending on the context, and by suggesting that validity may be more a matter of procedure than of form. In this view, valid arguments are those that enhance the purpose of resolving disagreement. Examples are offered of normative standards for arguments that follow from this position.

The final group of lectures moves to an even more macro level and considers the practice of argumentation in society. Lecture 21 presents the concept of argument spheres in which different expectations shape the culture of arguing. It then addresses the nature of argumentation in the personal sphere. Lecture 22 is devoted to the technical sphere, where argumentation takes place in specialized fields. The concept of *argument field* is presented, and examples are drawn from the fields of law, science, management, ethics, and religion. Lecture 23 deals with the public sphere, in which matters of general

interest are discussed, and the public participates in its capacity as citizenry. This lecture also explores the relationship between a robust public sphere and a healthy democracy.

Finally, Lecture 24 returns to the level of generality with which the series began and considers how arguments terminate and then explores the larger goals served by argumentation as a process of human interaction. Most significantly, argumentation is a means of collective judgment and decision making, and hence of governance. It also is a way of knowing and a means to the achievement of the goals of democratic life. As the conclusion notes, although it is sometimes thought fashionable to demean an *argument culture* as inimical to harmony and civil peace, a culture of argumentation is actually something to be embraced in a world in which important decisions must be made under conditions of uncertainty. ■

Introducing Argumentation and Rhetoric

Lecture 1

Arguing is reason giving. What do I mean by reason giving? When people speak to one another, or with an audience in mind, they make claims. They make statements that they believe, and that they would like for their listeners or their readers to believe as well. We make claims about matters that are uncertain, that we cannot establish absolutely or definitely.

In everyday usage, *argumentation* often has negative connotations, suggesting quarrelsomeness and unpleasantness. We must put this stereotype aside and examine argumentation in its classical sense—as the study of effective reasoning. This introductory lecture will explain just what this idea means. It also will relate argumentation to the field of rhetoric. *Rhetoric* is another term that has taken on pejorative connotations but that has a rich history as the study of how messages influence people. Argumentation is also related to two other fields, *logic* and *dialectic*, that will be explained in this lecture. We also will consider the question of how argumentation is ethical. With a clear understanding of these basic terms, we will be ready to launch our study, and the lecture will preview the directions we will take.

As mentioned above, argumentation is the study of effective reasoning. Arguing is reason giving, where reasons are justifications or support for claims. Rationality is the ability to engage in reason giving. The alternative to reason giving is to accept or reject claims on whim or command.

To talk about *effective* reasoning is to imply concern for an audience. Arguments are not offered in a vacuum. Success ultimately depends on audience assent, which in turn is based on audience acceptance of the reasoning. Hence argumentation is one way in which we attempt to persuade. It is possible, though, to conduct an argument with oneself.

Argumentation is a common but imperiled activity. It is sometimes thought that, because everyone does it, argumentation does not require careful study.

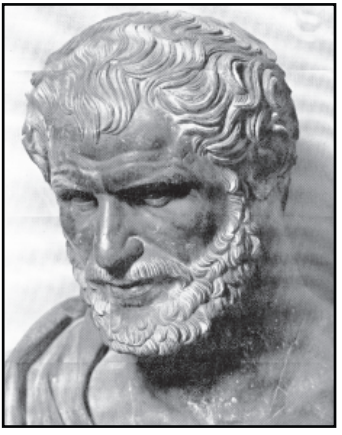
Argumentation indeed is pervasive in daily life. It occurs everywhere from informal encounters between people to the formally structured debate.

A recent newspaper column suggests, however, that argumentation may be a lost art. People increasingly interact only with those who agree with them. Differences of opinion are treated as unbridgeable. The result is to weaken opportunities for compromise, deliberation, and mutual understanding. Argumentation is the antidote. The difference between productive arguments and destructive quarrels often is in the understanding of principles.

Argumentation is both a product and a process. Sometimes our focus is on messages, the products of argumentation. Messages are both explicit and implicit. They can be cast into language, analyzed, and appraised.

Sometimes our focus is on interaction, the process of argumentation. Argumentation is an interaction in which people maintain what they think are mutually exclusive positions, and they seek to resolve their disagreement. They seek to convince each other, but at the same time they themselves are open to influence. We study how they go about convincing others and how their efforts might be more productive.

Argumentation is the field of study in which rhetoric, logic, and dialectic meet. From rhetoric we derive our concern with the audience. Today, rhetoric often has negative connotations, including insincerity, vacuity, bombast, and ornamentation. The classical understanding of rhetoric is the study of how messages influence people; it focuses on the development and communication of knowledge between speakers and listeners. "Thinking rhetorically" means reasoning with audience predispositions in mind.



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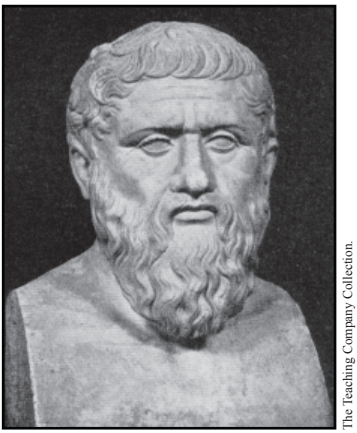
Aristotle (384–322 B.C.E.) wrote a treatise on the art of rhetoric.

From logic we derive our concern with form and structures of reasoning. Today, logic is often mistakenly seen as encompassing only formal symbolic and mathematical reasoning. Informal logic, from which argumentation borrows, is grounded in ordinary language and describes reasoning patterns that lack the certainty of mathematics.

From dialectic we derive our concern with deliberation. Today, dialectic is often understood as the grand sweep of opposing historical forces, such as the clash between capitalism and communism. In fact, the term refers to a process of discovering and testing knowledge through questions and answers. Although Plato's dialogues are the models of dialectic, any conversation that is a critical discussion will qualify.



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Plato (c. 428–347 B.C.E.).

Ethical considerations figure prominently in argumentation. Any attempt to influence other people raises ethical issues. It is a limitation on freedom of choice. It is the application of superior to inferior force. But argumentation seeks to achieve ethical influence. It does not influence people against their will but seeks their free assent. Without influence, the conditions of society and community are not possible. Argumentation respects different ways of thinking and reasoning.

This series of lectures will explore the nature of argumentation. We will try to accomplish several goals. We will learn a vocabulary that helps us to recognize and describe argumentation. We will become aware of the significance of choice and will broaden our understanding of the choices available to arguers. We will develop standards for appraising arguments and explaining what will make them better. We will examine a variety of historical and contemporary arguments as examples. We should improve our abilities both as analysts and as makers of arguments.

We will follow an organizational plan. We will begin by reviewing the assumptions underlying argumentation and the historical development of the field. We then will explore strategies and tactics of argument construction, attack, and defense. We will consider the components of argument in more detail, as well as how these components work. We will investigate the concept of validity and consider fallacies in argumentation. Finally, we will investigate how argumentation functions in society—in the personal, technical, and public spheres. ■

Essential Reading

"Argumentation," in Thomas O. Sloane, ed., *Encyclopedia of Rhetoric*, pp. 33–37.

Chaim Perelman, *The Realm of Rhetoric*, pp. 1–20.

Supplementary Reading

James A. Herrick, *Argumentation: Understanding and Shaping Arguments*, pp. 49–60.

Daniel J. O'Keefe, "The Concepts of Argument and Arguing," in J. Robert Cox and Charles Arthur Willard, eds., *Advances in Argumentation Theory and Research*, pp. 3–23.

Frans H. van Eemeren et al., *Fundamentals of Argumentation Theory: A Handbook of Historical Backgrounds and Contemporary Developments*, pp. 1–26, 98–102.

Questions to Consider

1. How has the pejorative connotation of *argumentation* limited our understanding of the field of study?

2. If the audience ultimately is the judge of argument, how can we avoid equating sound argument with whatever happens to persuade a particular audience?

Underlying Assumptions of Argumentation

Lecture 2

In this lecture, I want to focus on a series of assumptions that we make when we use argumentation as a means of decision making. There are five key assumptions, and I want to spend a little bit of time talking with you about each.

First, argumentation takes place with an audience in mind, and the audience is the ultimate judge of success or failure. Historical examples establish the significance of the audience.

- *The Federalist Papers* were written to influence a particular audience.
- The Lincoln-Douglas debates were conducted for a particular audience.

These examples suggest that the claims being advanced are not universal truths but are subject to the acceptance of actual listeners. The particulars of an audience's situation will affect its values, priorities, and methods of judgment. The audience for argumentation consists of the people the arguer wants to influence—not necessarily those who are immediately present. It is important here to note that recognizing differences in audience beliefs does not entail accepting the idea that any belief is as good as any other.

Argumentation takes place under conditions of uncertainty. We do not argue about things that are certain—although even the notion of certainty is audience-dependent. Things that are uncertain are potentially controversial. *The Federalist Papers* and Lincoln-Douglas debates again offer historical examples.

Controversies involve genuine differences of opinion that matter to the participants and which they wish to see resolved. Controversies have multiple dimensions. They may be explicit (recognized by the participants) or implicit

(recognized by an analyst). They may be unmixed (only one arguer maintains a position) or mixed (multiple arguers do so). They may be single (relating only to one claim) or multiple (relating to more than one claim).

Uncertainty implies that things could be otherwise; the outcome is not known for sure. Therefore, there is an inferential leap in the argument, from the known to the unknown. The audience is asked to accept this leap.

Argumentation involves justification for claims. Arguers offer a rationale for accepting an uncertain claim. The rationale represents reasons for making the inferential leap. The reasons are acceptable if they can convince a reasonable person who is exercising critical judgment. If so, we say that the claim is justified.

Argumentation involves justification for claims. Arguers offer a rationale for accepting an uncertain claim.

To say that claims are justified entails certain implications. Justification is different from proof; it is subjective and dependent upon a particular audience. It implies that people are willing to be convinced, yet skeptical enough not to take statements on faith. Justification is always provisional and subject to change in light of new information or arguments. It varies in degree of strength, ranging from merely plausible to highly probable.

Despite its seemingly adversarial character, argumentation is fundamentally a cooperative enterprise. Arguers share a common goal of reaching the best possible decision under the circumstances. The adversarial elements of argument are means toward the achievement of this common goal. They improve the rigor of the procedure. They reduce the likelihood that critical details will be omitted. They increase confidence in the result.

There are other matters on which arguers also agree. They share a frame of reference, some level of agreement on which their disagreement is built. They also share a common language and system of meanings; procedural

assumptions and norms, such as what counts as evidence; and the values of modesty, respect for the audience, and the importance of free assent.

Argumentation also entails risks. The two primary ones that arguers face are the risk of being shown to be wrong—hence losing the argument—and the risk of loss of face from the perception that they have performed badly in the argument. If a person knew, for sure, that he or she was right, that person might not have an incentive to engage in argument. For example, some scholars will not engage in argument with those who seek to deny historical facts. Others will not engage in argument with those who cast doubt on generally accepted scientific theories.

Conversely, the decision to engage in argumentation suggests a willingness to run the risks. When Douglas opted to enter into debate with Lincoln, he demonstrated this willingness. People run the risks because they do not know, for sure, that they are right, and because they value the judgment of their adversaries and want assent only if it is freely given. In valuing the personhood of the adversary, the arguer claims the same value for himself or herself. ■

Essential Reading

James A. Herrick, *Argumentation: Understanding and Shaping Arguments*, pp. 63–74.

Frans H. van Eemeren et al, *Argumentation: Analysis, Evaluation, Presentation*, pp. 3–36.

Supplementary Reading

Wayne Brockriede, "Where Is Argument?" in Robert Trapp and Janice Schuetz, eds., *Perspectives on Argumentation: Essays in Honor of Wayne Brockriede*, pp. 4–8.

Michael A. Gilbert, *Coalescent Argumentation.*

Questions to Consider

1. If argumentation involves uncertainty, how can arguers arrive at conclusions with any degree of confidence?

2. How can people with strong but opposing convictions engage in argumentation and preserve its cooperative character?

Formal and Informal Argumentation

Lecture 3

In this lecture, what I hope to do, without becoming too technical or too long, is to explore the properties of formal reasoning, the typical patterns, and then to see what the limitations of formal reasoning are as a model for argumentation.

For much of the 20th century, the systematic study of argumentation was associated with formal logic, which achieves deductive certainty at the price of limited relevance to everyday affairs. Formal argument is deductive in nature. The conclusion follows necessarily from the premises and contains no information that is not already present (at least implicitly) in the premises.

These properties suggest two corollaries. First, deductive reasoning is analytic; it requires no reference to the external world, and it may be counterfactual. Second, deductive reasoning does not add to our store of knowledge; it merely rearranges it.

The basic unit of reasoning in formal argument is the syllogism, a structure consisting of two premises and a conclusion. Categorical syllogisms contain statements that relate categories to other categories.

- The statements may be universal or partial.
- The statements may be inclusive or exclusive.
- The only terms that identify quantity are *all, some,* and *none.*
- The soundness of a categorical syllogism can be tested either by drawing Venn diagrams or by applying the rules of distribution.

Conditional syllogisms begin with an "if-then" statement. The "if" clause is called the *antecedent*, and the "then" clause is called the *consequent*. The argument is sound if the antecedent is affirmed or the consequent is denied. Conversely, denying the antecedent or affirming the consequent will not lead to a sound argument.

Disjunctive syllogisms begin with an "either-or" statement. The argument accepts or rejects one of the alternatives and draws a conclusion about the other. Rejecting one option always implies accepting the other. Accepting one option implies rejecting the other when *or* is used in an exclusive sense (one or the other but not both); it implies the opposite when *or* is used in a nonexclusive sense (one or the other or both); this distinction often must be determined from the context.

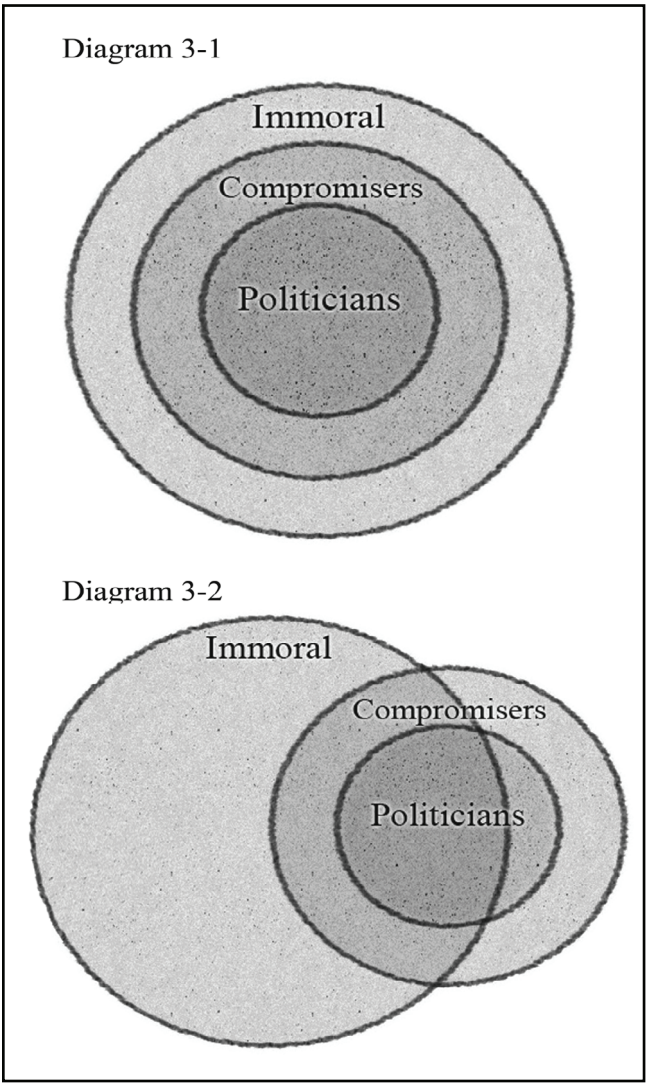
Disjunctive syllogisms begin with an "either-or" statement. The argument accepts or rejects one of the alternatives and draws a conclusion about the other.

Although regarded as the model of argumentation well into the 20th century, in recent scholarship formal reasoning is not seen as the prototype of argumentation. Very seldom does one actually reason in syllogistic form. The forms of statements cannot be separated from their content. Also, for many arguments, we need finer gradations of quantity than *all*, *some*, and *none*.

Most argumentation is not represented by a form in which the conclusion contains no new information. Reasoning with an audience enables its members to move from what already is known and believed to some new position. This movement involves a leap of faith that the arguer seeks to justify.

Informal reasoning, therefore, functions as the model for everyday argumentation. The argument cannot be extracted from the language in which it is cast. The conclusion contains new information not present in the premises, does not follow with certainty but relies on some degree of probability, and can be asserted with confidence if the arguer adheres to

the conventions of informal reasoning, which are based on accumulated experience. Though eclipsed in the recent past, informal reasoning has a long history, as we will see in the next lecture. ■



Essential Reading

Robert J. Fogelin and Walter Sinnott-Armstrong, *Understanding Arguments: An Introduction to Informal Logic*, pp. 115–199.

"Logic," "Syllogism," in Thomas O. Sloane, ed., *Encyclopedia of Rhetoric*, pp. 450–456, 761–763.

Supplementary Reading

James A. Herrick, *Argumentation: Understanding and Shaping Arguments*, pp. 75–95.

Ralph H. Johnson, *Manifest Rationality: A Pragmatic Theory of Argument*, chapter 3.

Ray E. McKerrow, "Rationality and Reasonableness in a Theory of Argumentation," in J. Robert Cox and Charles Arthur Willard, eds., *Advances in Argumentation Theory and Research*, pp. 105–122.

Questions to Consider

1. Under what circumstances can an argument that proceeds from general to specific be inductive? Under what circumstances can an argument that proceeds from specific to general be deductive?

2. Is informal reasoning a weaker mode than formal reasoning? Why or why not?

History of Argumentation Studies

Lecture 4

Now, I want, with all immodesty, to survey 25 centuries of history and explore how this field of study developed and how it came to take the shape it has today.

The study of informal argumentation can be traced back to the beginnings of rhetoric in ancient Greece. The immediate impetus was political. A tyrant, Thrasybulus of Syracuse, had been overthrown. Citizens needed to know how to argue in court to recover property that had been seized by the tyrannical regime. To meet this need, itinerant teachers began to lecture in Athens and the surrounding area. They were known as Sophists—and that was not a term of derision.

One of the earliest Sophists was Protagoras, known as the "father of debate" because he taught that there were two sides to every question. Other prominent Sophists included Gorgias and Isocrates. The Sophists introduced the notion of commonplaces, mental storehouses where the materials of argument could be found.

The Sophists were accused of excessive concern for technique. It was charged that they regarded winning an argument as an end in itself, regardless of one's purpose or the soundness of one's position. Plato regarded these excesses as inherent in rhetoric (and hence in argumentation) itself. Aristotle offered a systematic treatment of argumentation and rhetoric to demonstrate that the subject was legitimate and worth studying. Argumentation was the foundation of rhetoric, the basis for attempts to influence others.

With only minor adjustments, the Aristotelian synthesis continued to dominate the study of argumentation during the Roman era and the medieval period. Romans adapted the theory of the Greeks for pedagogical purposes. Rhetoric was seen as a means of instruction. The subject was divided into invention, arrangement, style, memory, and delivery, with argumentation closely identified with the first two of these canons. Rhetoric was one of the

seven liberal arts, and it focused on the training of the citizen-orator. In the medieval period, the dominant social institution was the church, so rhetoric came to be regarded as the study of preaching.

Significant redirections of the subject occurred during the early Renaissance. Peter Ramus bifurcated the canons, associating invention and arrangement with philosophy. Rhetorical scholars lost interest in argumentation. They instead developed elaborate systems for classifying figures of speech, gesture, and other stylistic devices. René Descartes developed the method of systematic doubt, maintaining that one could reason only from self-evident premises.

Argumentation was the foundation of rhetoric, the basis for attempts to influence others.

These influences remained dominant for approximately 300 years. Reasoning became identified with the study of formal logic. Nonformal reasoning sought to emulate the certainty of formal logic. Within specialized fields, practitioners developed models of reasoning that were claimed to be deductive. Argumentation was seen, for the most part, as the demonstration of self-evident truth. This trend reached its apex in the early 20th century, with the dominance of logical positivism in philosophy.

During the 20th century, growing awareness of what these approaches omitted led to dissatisfaction with the models of reasoning. Positivism dismissed as meaninglessness attempts to make sense of some of the perplexities of modern life. It regarded statements of value as merely reports on the state of one's glands. It could not establish, for instance, that freedom was better than tyranny or that democracy was better than communism, because it excluded questions of this type from consideration.

The formal deductive model led to two "modern dogmas." One was the dogma of scientism, holding that nonscientific claims, because they could not be verified, were nonsense and all of equal value. One was the dogma of irrationalism, holding that nonformal questions could be decided only by

irrational means such as force. Unhappiness with these alternatives led to reformulations of the concepts of reason and rationality and likewise led to a revived role for rhetoric in the study of argumentation.

Several intellectual influences of the past 50 years have encouraged this revival of interest. Toulmin's attempt to explain ethical reasoning led to a more widely applicable model of nonformal reasoning. Perelman's attempt to explain how people reason about justice led him to the revival of a rhetorical theory based on argumentation. Hamblin's challenge to the conventional wisdom regarding fallacies fueled the contemporary informal logic movement. Van Eemeren and Grootendorst examined the role of argumentation in critical discussions, and others interested in "dialogue logics" charted how argumentation occurs in informal settings.

Habermas and other social theorists emphasized the role of communication in the constitution of society and offered normative standards for argumentation under ideal speech conditions. The "rhetorical turn" in specialized fields of study undermined deductive models and re-established an active role for argument in shaping perception.

Today, argumentation is an exciting and vibrant field of study. Though solidly grounded in a renewed understanding of rhetoric, it also has strong interdisciplinary appeal. Breadth and interdisciplinarity have both positive and negative attributes. The subject has both macro- and micro-levels and both product and process dimensions. ■

Essential Reading

"Classical Rhetoric," in Thomas O. Sloane, ed., *Encyclopedia of Rhetoric*, pp. 92–115.

J. Robert Cox and Charles Arthur Willard, eds., *Advances in Argumentation Theory and Research*, pp. xiii–xlvii.

Supplementary Reading

Michael A. Gilbert, *Coalescent Argumentation*, chapter 1.

Frans H. van Eemeren et al., *Fundamentals of Argumentation Theory,* chapter 2.

Questions to Consider

1. What might be some of the key trends in argumentation theory if Peter Ramus had not moved the subject from rhetoric to philosophy?

2. What are the similarities and differences between current approaches to persuasion and those that were dominant in classical Greece?

Argument Analysis and Diagramming

Lecture 5

In short, we argue about significant controversies that are inherently uncertain; we argue about that which could be otherwise.

This lecture examines how controversies begin and how the process of arguing produces individual arguments. It will consider the claim as the most basic part of the argument and will identify different types of claims. Then it will present the basic structure of an individual argument, consisting of a claim, evidence for it, an inference linking the evidence to the claim, and a warrant justifying that inference. These components are not always apparent in actual arguments, but they can be extracted and diagrammed for purposes of argument analysis and appraisal.

People argue—that is, they engage in reason giving—when certain conditions are met. First, some controversy or disagreement must exist between them. Second, the controversy must be nontrivial. Third, the assent of the other party must be desired by each; if this condition is met, then one arguer cannot simply abandon the situation. Also, assent must be desired only if it is freely given. Respect for the other party makes this criterion essential. Our desire for confidence in the result also freely given assent from all parties to the argument.

Additionally, it is essential that no easier means exists for resolving the disagreement. We must be unable to use empirical methods, consult a universally recognized authority, or deduce the answer with certainty from what we already know.

In short, we argue about significant controversies that are inherently uncertain; we argue about that which could be otherwise.

How do controversies begin? We can consider some sample statements that might be made in conversation. In August 2005, George W. Bush was president of the United States. The Teaching Company sells this course for $49.95. The red tie is prettier than the blue one. The city government

is unsatisfactory. Capital punishment is murder. Congress ought to pass the President's budget.

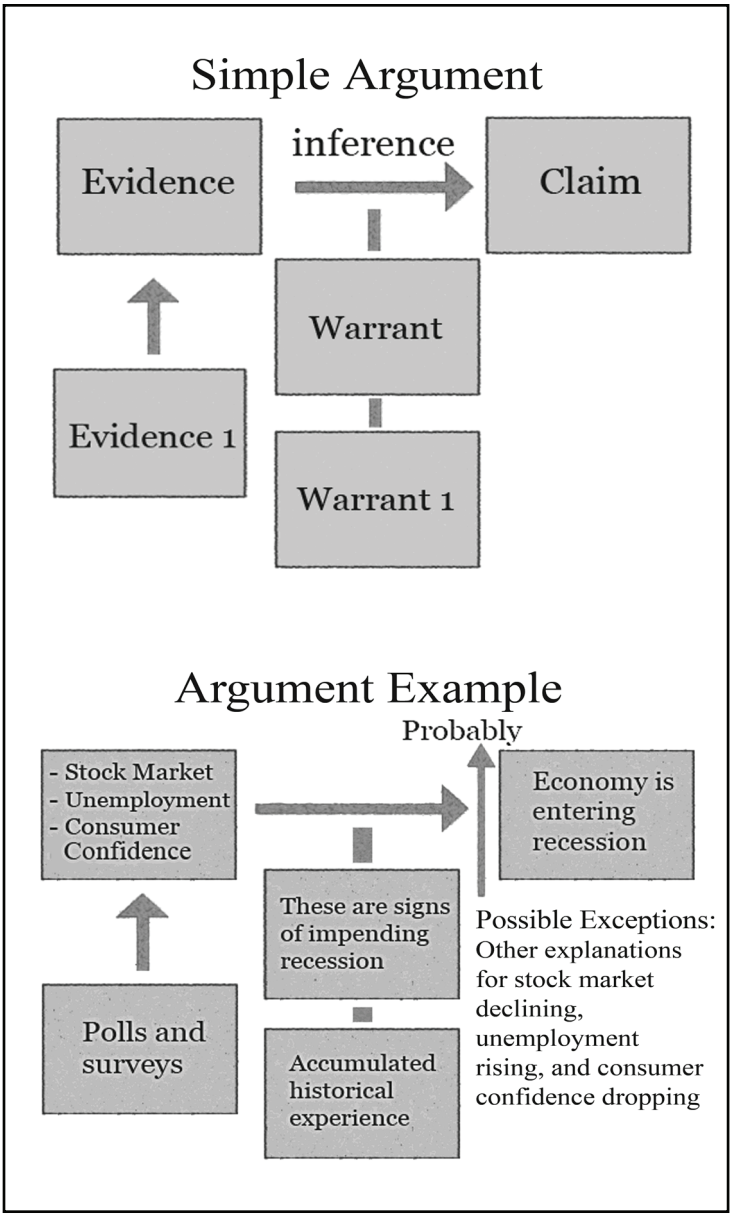
With respect to each of these statements, how would we know which ones were true?

- In some cases, as in statement 1, we could rely on common knowledge.
- In other cases, as in statement 2, we could rely on widely shared empirical methods.
- In a third type of case, as in statement 3, we could rely on personal judgment or taste.
- In another type of case, as in statements 4–6, further discussion would be required.

The knowledge, method, or judgment relied on will determine what sort of response one is likely to make to each of the six statements. The response may be nonargumentative, such as silence or immediate assent or denial. Nonargumentative responses will occur when the matter is trivial, there is a wide consensus, or the subject is so emotionally intense that discussion is not possible. Statements 1–3 would probably trigger nonargumentative responses, in which case the controversy would end.

If the response is "How do you know?" or "What do you mean?" the maker of the statement must supply reasons that will be assessed and responded to further. If the reasons are deemed satisfactory, the argument then will stop. If not, the arguer will need to elaborate further on the reasons or introduce additional reasons to satisfy the objections. This situation will be especially likely to occur when previously accepted assumptions are challenged or when new situations present themselves.

When one speaks or writes in public, rather than engages in conversation, one acts as if such a challenge has occurred, and thus that there is a need to defend one's claims.


Simple Argument
Evidence
inference
Claim
Warrant
Evidence 1
Warrant 1
Argument Example
Probably
- Stock Market
- Unemployment
- Consumer Confidence
Economy is entering recession
These are signs of impending recession
Possible Exceptions: Other explanations for stock market declining, unemployment rising, and consumer confidence dropping
Polls and surveys
Accumulated historical experience

Claims are the statements that the listener is asked to accept, for which the speaker will provide reasons if needed. There are four basic types of claims.

The first basic type, the claim of fact, involves description. These claims concern matters that, in theory, can be described and verified independently by others. They may relate to the past, present, or future.

The second type, claims of definition, involve interpretation. Claims of this type place concepts in categories and provide perspective. The interpretation is important because definitions are not neutral.

A claim of value, the third basic type of claim, involves judgment. Judgment represents an appraisal or evaluation. The evaluation can be absolute or comparative, and it can involve instrumental or terminal values.

Lastly, claims of the fourth type, claims of policy, involve action. They are assertions about what should be done. They are characteristic of deliberative bodies such as Congress.

Classifying claims is important because the proof requirements differ for different types of claims.

It is important to understand the components of an argument, in addition to the claim. Not all these components may be stated explicitly, but they are implicit in the argument and can be filled in by the analyst.

The first step in what may become an argument is for an advocate to advance a claim. If his or her claim is accepted immediately, the matter ends, and there is no further argument. If it is not accepted, then the advocate needs to produce evidence to support the claim.

In this situation, one of two things will happen. If the truth of the evidence is in dispute, then a separate argument will be advanced to establish it. If the truth of the evidence is accepted but it is not seen as justifying the claim, then a warrant is provided for the inference from evidence to claim. If the warrant is not accepted, then there will be a separate argument to back it up. Exceptions may be noted, and the claim may need to be qualified. This

process continues until the arguers reach agreement, or the dispute is resolved by a third party.

Now we begin a series of lectures on argumentation's strategies and tactics. We start by considering where we find arguments and what they look like.

We have identified the major components in a model of argument adapted from the writing of the contemporary philosopher Stephen Toulmin. Claims are the statements that we want listeners to believe and on which we want them to act. Evidence represents the grounds for making a claim. It is not identical to the claim but is used to support it. It must be accepted by the audience, or a separate argument will be required to establish its truth. The inference is the main proof line leading from evidence to claim.

The warrant is a license to make the inference. Like the evidence, it either must be accepted by the audience, or else it must be established by separate argument. It is a general rule that recognizes the possibility of exceptions. Exceptions to the warrant require qualifying the claim. An example will illustrate how this model captures the essential components of an argument. ■

Essential Reading

"Controversy," in Thomas O. Sloane, ed., *Encyclopedia of Rhetoric*, pp. 169–171.

Frans H. van Eemeren, et al., *Fundamentals of Argumentation Theory: A Handbook of Historical Backgrounds and Contemporary Developments*, pp. 129–149.

Supplementary Reading

Dale Hample, "The Toulmin Model and the Syllogism," in William L. Benoit, Dale Hample, and Pamela J. Benoit, eds., *Readings in Argumentation*, pp. 225–238.

Richard D. Rieke and Malcolm O. Sillars, *Argumentation and Critical Decision Making*, pp. 107–111.

Stephen Toulmin, *The Uses of Argument*, pp. 94–145.

Questions to Consider

1. How are productive controversies different from those that are merely contentious and quarrelsome?

2. How does the diagram of argument make clear that disagreements must be built on some level of agreement?

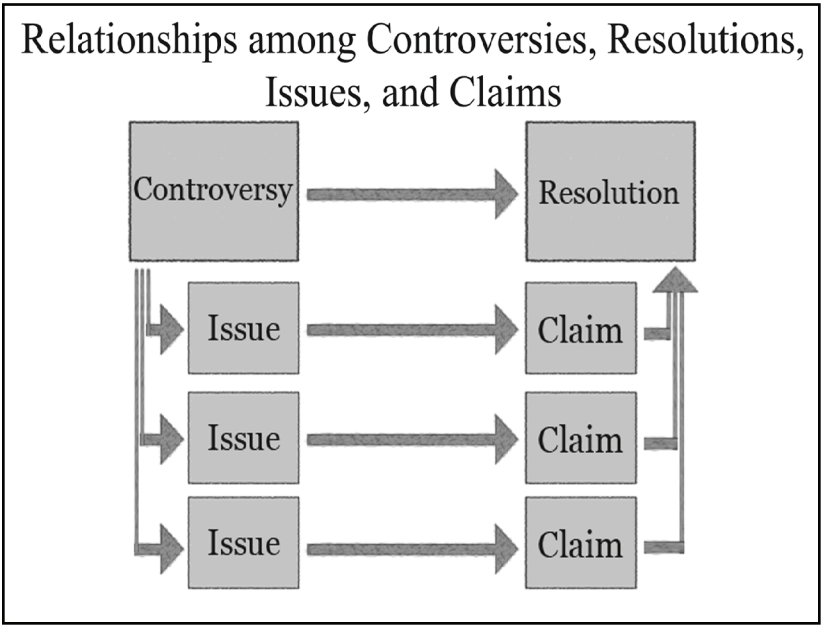
Complex Structures of Argument

Lecture 6

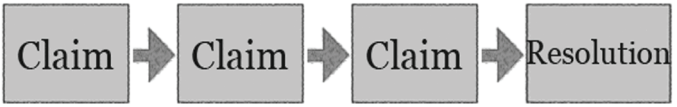
In a complex argument there is one main claim—the one that captures the substance of the controversy—and we call it the resolution. Any controversy could be seen as posing a major question.

The model developed in the last lecture is of a simple argument. There is a single claim. The argument develops sequentially, as in conversation. In contrast, many arguments are complex, involving multiple claims, and must be developed without knowing exactly what the audience will accept and dispute.

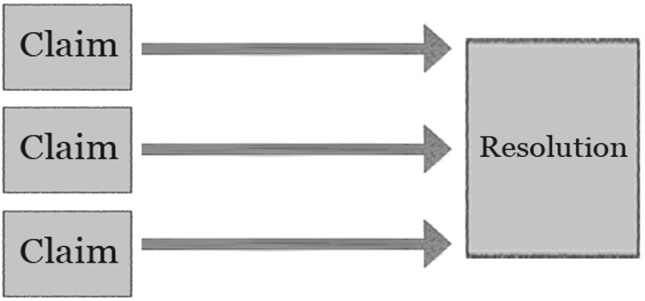
In a complex argument, the resolution is a statement capturing the substance of the controversy. It is the ultimate claim on which judgment is sought. It may be explicitly stated or it may be implicit in the discourse



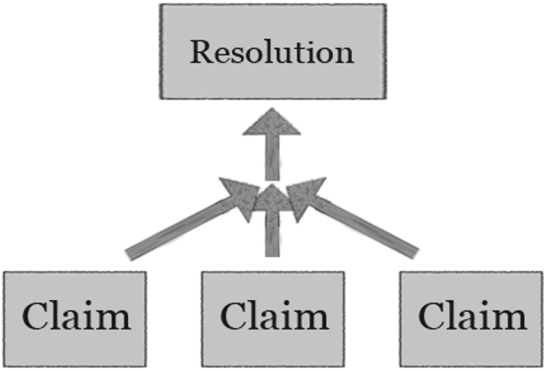
Series Structure of Argument



Parallel Structure of Argument



Convergent Structure of Argument

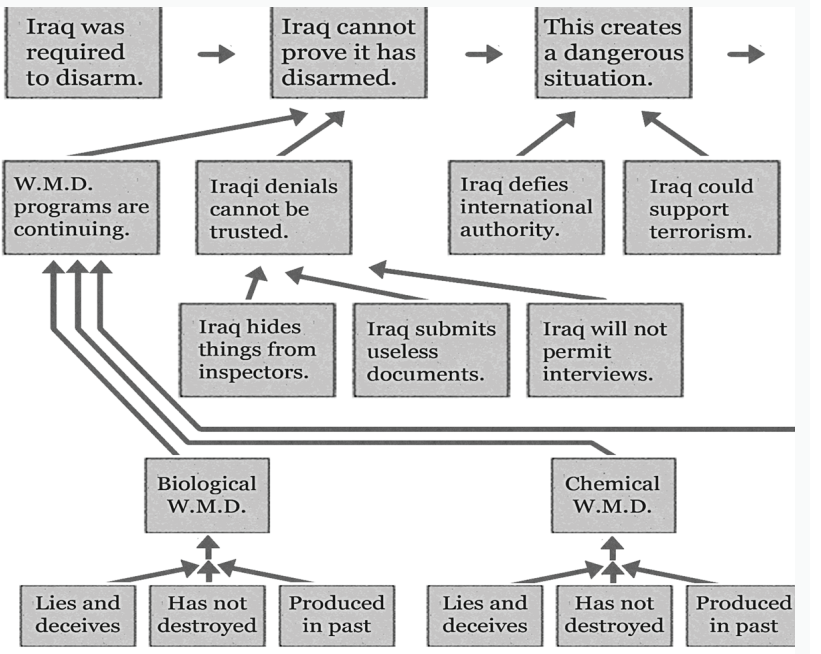


of the participants. It should be capable of being captured in a single declarative sentence. As with other claims, there are different types of resolutions—fact, definition, value, and policy—with different proof requirements.

Issues are implicit in the resolution. A precise definition of *issue* is important. The term is used loosely in everyday language. Issues are questions inherent in a controversy and vital to the success of the resolution.

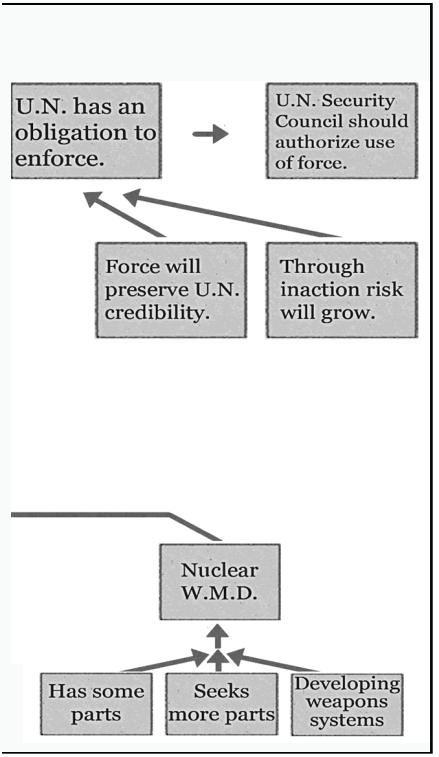
Issues can be located in different ways. First, one can examine the text of the resolution to find the issue or issues. One can also locate issues in an argument by examining the underlying context. One can also derive them

Diagram of Colin Powell's Speech to the United Nations



from a pattern of claims and responses. We can subtract uncontested issues from potential issues to arrive at actual issues.

There are three major patterns for organizing complex arguments. Arguments may be arranged in a series (or subordinative) structure in which each argument is dependent on the others and all must be carried in order to carry the resolution. Arguments may also be arranged in a convergent (or coordinative) structure in which each argument is independent of the others. The whole group of arguments, though, must be carried in order to carry the resolution. Another organizational pattern for complex arguments is parallel (or multiple) structure in which each argument is independent of the others. In this pattern, each argument separately is sufficient to carry the resolution.


U.N. has an obligation to enforce.
U.N. Security Council should authorize use of force.
Force will preserve U.N. credibility.
Through inaction risk will grow.
Nuclear W.M.D.
Has some parts
Seeks more parts
Developing weapons systems

Colin Powell's 2003 speech to the United Nations Security Council illustrates the structure of complex arguments. The resolution was something like, "The Security Council should authorize the use of force in Iraq." This is a policy claim. It raises the standard *topoi* of a policy claim. (The concept of *topoi*, or "stock issues," is discussed in Lecture 7.)

Several subsidiary arguments were used to support the resolution: The Iraqi regime is tyrannical. Iraq supports terrorists. Sanctions have been effective. Iraq has, or soon will have, weapons of mass destruction, making urgent action necessary. The original structure of the argument was

a combination of parallel and convergent. After the fact, supporters of the President's policy treated the arguments as purely parallel, whereas opponents treated them as convergent.

Although pedagogically helpful, the use of argument models (like those developed in the last two lectures) has been criticized on several grounds.. Models are instruments for identifying and analyzing arguments, not necessarily for constructing them. Models "abstract out" subtle features of language, emphasis, and presentation that are integral to actual arguments. Models suggest that a linearity of movement runs from the evidence to the claim, which is not characteristic of actual arguments.

Nevertheless, argument models are helpful if properly used. They help us to identify the components of an argument. They alert us to the internal dynamics of the argument. They permit a "translation" of different arguments into a common form to make comparisons easier. ■

Essential Reading

Frans van Eemeren et al., *Argumentation: Analysis, Evaluation, Presentation*, pp. 63–78.

Charles Arthur Willard, "On the Utility of Descriptive Diagrams for the Analysis and Criticism of Arguments," in William L. Benoit, Dale Hample, and Pamela J. Benoit, eds., *Readings in Argumentation*, pp. 239–257.

Supplementary Reading

Austin J. Freeley and David L. Steinberg, *Argumentation and Debate*, pp. 35–49.

J. W. Patterson and David Zarefsky, *Contemporary Debate: Critical Thinking for Reasoned Decision Making*, pp. 16–27.

Richard D. Rieke and Malcolm O. Sillars, *Argumentation and Critical Decision Making*, pp. 41–62.

Questions to Consider

1. Under what circumstances might a series, parallel, or convergent structure each be the most productive and useful for an arguer?

2. How can the limitations of argument diagrams be minimized so that the diagrams will assist in the analysis and evaluation of arguments?

Case Construction—Requirements and Options

Lecture 7

The particular set of arguments that we put together to support a resolution or to oppose a resolution for a particular audience is what we mean by the term case. In order to introduce this concept, I'd like to remind us of a diagram that we talked about last time, when we talked about the relationship among controversies, resolutions, issues, and claims.

The complex structure of argument discussed in Lecture 6 can be regarded as a case, the pattern of arguments used to support a claim. In assembling a case, arguers must be sure to address all the issues raised by the claim in the particular situation. An aid to identifying the issues is the concept of *topoi*, meaning "places," which are patterns of issues that recur with given types of claims and situations. Addressing the issues will satisfy an initial burden of proof. In meeting these requirements, arguers have choices about what arguments to use and how to arrange them. In individual arguments, choices are made about which evidence to use and how to arrange it. This lecture will identify the key choices and the factors that go into making them.

A case is the structure of subsidiary claims and evidence selected for supporting or opposing a resolution for a specific audience. Constructing a case involves choices from a broader range of arguments that are potentially available. Choices are made regarding which arguments to use. Within arguments, choices are made regarding which evidence to use. Choices are made regarding how to arrange arguments and, within arguments, how to arrange evidence.

Choices are audience-specific. They adapt to a particular audience the arguments that were formed with a broader audience in mind. They combine creativity with constraint. The principal constraint on case construction, as noted in Lecture 6, is the need to address all the issues in the resolution.

Topoi (“stock issues”) offer a shortcut to locating issues in a given case. *Topoi* (literally “places”) are issues always raised when addressing resolutions of a given type. They are recurrent patterns of analysis. As noted above, by classifying the resolution into a certain type, we can determine the *topoi* for it.

For resolutions of fact, the *topoi* can be identified. What is the criterion for assessing truth? Has the criterion been satisfied? *Topoi* can also be identified for resolutions of definition. Is the interpretation relevant? Is it fair? How should we choose among competing interpretations?

Choices are also made regarding the organization of individual arguments. Once the overall organizational structure is determined, within a parallel or convergent structure, there are additional choices to be made.

For resolutions of value, the *topoi* can also be identified. Is the value truly as good or bad as alleged? Which among competing values should be preferred? Has the value been properly applied to the specific situation? For resolutions of policy, to identify the *topoi*, we look for answers to the following questions: Is there a problem? Where is credit or blame due? Will the proposal solve the problem? On balance, will the proposal be better?

Addressing the issues will meet the advocate’s initial burden of proof. The supporter of the resolution must present a case for it that would be compelling in the absence of any response. This burden is met by satisfactorily answering the issues raised by the resolution. Once this burden is met, the burden of rejoinder comes into play. This is the responsibility to keep the discussion going, analogous to the production burden in law. This burden shifts back and forth between the arguers. Its being met by a supporter of the resolution means that an opponent must now respond. The burden of rejoinder prevents the argument from stopping. It also prevents arguers from just repeating their previous positions without extending them to answer subsequent challenges.

In selecting arguments for the case, the key considerations are whether the arguments are strong enough and how many to include. Strength is a function of two main factors: the listener's prior adherence to the evidence or the likelihood that adherence can be obtained, and the relevance of the claim to the resolution. Each of these factors is affected by other variables, such as the degree of probability, the time frame of the argument, and the argument's consistency with common sense and generally accepted values.

Arguments in the debate about Social Security reform illustrate the concept of strength. The argument that the Social Security trust fund eventually may be depleted is relatively strong. The argument that African Americans are hurt by Social Security because they have lower life expectancy than whites is relatively weak.

Determining the amplitude (number and range of arguments) is affected by more factors than just the amount of time available. Amplitude can be increased to offset the inconclusiveness of individual arguments or to hedge against the heterogeneity of the audience. Increasing amplitude has risks, however: A poor argument reflects badly on all choices and on the arguer's credibility, and piling up arguments may seem overly defensive. With appropriate care in framing arguments, some of the dangers of increasing amplitude can be minimized. Similar considerations affect the selection of evidence in individual arguments.

Choices are also made regarding the organization of individual arguments. Once the overall organizational structure is determined, within a parallel or convergent structure there are additional choices to be made. The advocate of the argument must decide whether to put the strongest arguments first or last. He or she must also choose whether to anticipate and answer objections before they are made. Also, the argument advocate must decide whether to proceed from the familiar to the unfamiliar. These choices are matters of logical indifference but rhetorical significance.

Independent arguments follow several common organizational patterns. These patterns include chronological order, spatial order, categorical organization, cause-effect or problem-solution structures, comparisons or contrasts, and patterns that rely on the method of residues. It is not necessary

to organize by reference to the list of *topoi* so long as each of the *topoi* is addressed effectively.

The assembling of the case in Lyndon B. Johnson's 1965 voting rights message offers an instructive example. Johnson spoke to the relevant *topoi*. He also arranged his arguments in a complex structure, giving priority to matters of principle, and he made careful strategic choices about the ordering of his arguments. ■

Essential Reading

Austin J. Freeley and David L. Steinberg, *Argumentation and Debate: Critical Thinking for Reasoned Decision Making*, chapter 12.

Chaim Perelman, *The Realm of Rhetoric*, pp. 138–152.

Supplementary Reading

J. W. Patterson and David Zarefsky, *Contemporary Debate*, pp. 59–69.

Richard D. Rieke and Malcolm O. Sillars, *Argumentation and Critical Decision Making*, pp. 225–247.

Questions to Consider

1. In what ways do the choices discussed in this lecture reflect both creativity and constraint? How can creativity be enhanced in the face of constraint?

2. How does an arguer know when the case is strong enough to satisfy the initial burden of proof and trigger the burden of rejoinder?

Stasis—The Heart of the Controversy

Lecture 8

Now we're about to explore how an advocate can respond to an opposing case. The very first thing we need to know is how to determine exactly what is in dispute. This is extremely important in order to focus the response on the true heart of the controversy and not to be misdirected.

Stasis defines the focal point of a dispute. The term means "a point of rest" between opposing forces. Movement toward a goal cannot resume until the opposition is transcended. *Stasis* enables us to identify precisely what is in dispute and invites advocates to respond to it. The concept originated in classical rhetoric and originally was designed for courts of law.

Classical theory established four categories of *stasis*.

- *Stasis* in conjecture concerns whether an act occurred.
- *Stasis* in definition concerns what the act should be called.
- *Stasis* in quality concerns whether the act is justified.
- *Stasis* in place concerns whether the discussion is occurring in the proper forum.

Several features of the *stasis* categories deserve mention. First, what determines the *stasis* is not the original assertion but the response to it. One may respond to a claim in a variety of ways. The specific response, together with the original claim, will identify just what is at issue and, hence, where the *stasis* lies. Therefore, an important preliminary to attacking a case is to determine where the *stasis* most usefully can be drawn.

Also, in general, *stasis* is progressive. *Stasis* in definition implicitly concedes conjecture (because one would not try to arrive at a definition of an act if the

occurrence of the act were in question). *Stasis* in quality implicitly concedes conjecture and definition (one would not try to determine whether an act was justified if its occurrence or definition were in question). As an exception to the above principle, *stasis* in place is pre-emptive. Because of the progressiveness of most *stasis* categories, an advocate should select a *stasis* as close to the beginning of the chain as can be sustained. Presenting multiple *stases* is better than shifting from one to another during the argument.

The concept of *stasis* can be adapted to nonlegal arguments. Multiple issues are in play, each with its own *stasis.* One popular model applies conjecture, definition, and quality to each of the four *topoi* for a resolution of policy. The *topoi* can be identified as *ill, blame, cure,* and *cost*. The result is a four-by-three matrix with 12 possible *stases* (ill-conjecture, ill-definition, and so on). *Stasis* in place usually is not applicable.

Four by Three Matrix of Possible *Stasis* Points

	Conjecture	Definition	Quality
Ill	Do HMOs leave patients unsatisfied?	Is dissatisfaction a violation of rights?	Is the violation great enough to warrant change?
Blame	Do HMOs make the key decisions?	Is their discretion abused?	Should we consider other circumstances?
Cure	Can a bill of rights be devised?	Will it work?	How much abuse will it address?
Cost	What will a bill of rights cost patients?	Are they comparatively real costs?	Are the costs worth it?

Failing to agree upon the *stasis* can have serious consequences for the argument. One possible consequence is that it can "hijack" the argument and change understanding of what it is, as the argument for Social Security reform demonstrates. Another is that it can result in the loss of the argument, as one writer suggests occurred in the famous Scopes trial. Additionally, failure to agree upon *stasis* can lead to a stalemate, as has occurred in the controversy about abortion rights.

The concept of *stasis* has multiple uses. It enables the argument analyst to locate the center of the dispute. It permits the arguer to make strategic choices about alternative means of responding a given situation, as a preliminary to attack and defense. It also helps arguers to avoid the tendency to "talk past each other." ■

Essential Reading

Edward P. J. Corbett and Rosa A. Eberly, *The Elements of Reasoning*, 2nd ed., pp. 26–120.

"*Stasis*," in Thomas O. Sloane, ed., *Encyclopedia of Rhetoric*, pp. 741–745.

Supplementary Reading

Antonie Braet, "The Classical Doctrine of *Stasis* and the Rhetorical Theory of Argumentation," *Philosophy and Rhetoric* 20 (1987), pp. 79–93.

Ray Nadeau, "Hermogenes' *On Stases:* A Translation with an Introduction and Notes," *Communication Monographs* 31 (November 1964), pp. 361–424.

Questions to Consider

1. Why is *stasis* more complex when applied to policy disputes than to legal controversies?

2. If the participants in a dispute have different opinions about where *stasis* lies, how can the dispute proceed?

Attack and Defense I

Lecture 9

Attacking arguments involves several selection choices. Which arguments to attack? Not every argument requires attack. Attacking every argument can involve one in tenuous situations or create internal inconsistencies. Arguments not attacked may be either ignored or granted.

The dynamics of controversy involve what happens after a case is presented. Assuming that the case is plausible on its face, its presentation obligates other arguers either to accept it or to meet the burden of rejoinder. The burden of rejoinder is met through the interrelated processes of attack and defense, together referred to as *refutation*. We should not be misled by the military metaphor in thinking about attack and defense. The goal of arriving at sound judgment is shared. If well conducted, attack and defense are constructive processes and both parties benefit from the exchange. What attack and defense in argumentation do share with military campaigns is concern for strategic choices and for making them carefully.

To attack an argument, one must make several choices. First, one must decide which arguments to attack. Deciding what to attack helps to narrow the potential issues to the actual issues. As with case construction, the strength of the attack and the relevance of the argument to the resolution should govern the decision.

One must also decide which part of the argument to attack. One option is to attack the claim, by denying it outright or by countering it. Another option is to attack the evidence on which the claim is based. Additionally, one can attack the inference linking evidence to claim or even the contextual assumptions that undergird the whole argument. The choice should be governed by what will give the most result with the least effort (the mini-max principle).

Also, one must choose what type of attack to develop. Asking a question is basically a holding operation that can be nullified when the answer is given, unless the question is unanswerable. Identifying internal deficiencies in the argument will show how the arguer failed to meet the burden of proof. Identifying inconsistencies in the argument can cast doubt on the sincerity of the arguer, as well as requiring a response to the inconsistency. Labeling the opponent's argument strategy can identify fallacies or attempts to thwart the goal of critical reasoning and resolving disagreement. Using a counterargument is a denial of the claim itself, defining a point of *stasis,* and forcing the listener to choose between competing claims. Recontextualizing the argument will place it in a broader context in which it now appears unsatisfactory. Although arguers often make these choices instinctively and in the heat of the moment, studying them systematically helps to make us aware of the range of choices and to "coach" better strategic judgments.

A selection from the Kennedy-Nixon debates of 1960 helps to illustrate these selection choices. There was much substantive argument in the Kennedy-Nixon debates, as in this example about the size of the federal budget. Nixon's argument, as presented by the panelist, was that the cost of Kennedy's program would exceed that of his own by $10 billion dollars a year. Kennedy makes several choices about how to attack this argument. He recontextualizes it as an argument about whether the budget is in balance. He provides counterarguments showing examples where his budget will cost less than Nixon's. He acknowledges that he will spend more on education and defense, implying that these increases are desirable. He accuses Nixon of misstating his figures in reaching the conclusion that his budget will cost $10 billion more than Nixon's. These choices reflect Kennedy's application of the mini-max principle. In turn, we can consider whether he made the best strategic choices. ■

Essential Reading

Austin J. Freeley and David L. Steinberg, *Argumentation and Debate: Critical Thinking for Reasoned Decision Making*, chapter 14.

Richard D. Rieke and Malcolm O. Sillars, *Argumentation and Critical Decision Making*, pp. 225–248.

Supplementary Reading

J. W. Patterson and David Zarefsky, *Contemporary Debate*, pp. 70–85.

Questions to Consider

1. What skills and attitudes are necessary for the attack on an argument to achieve its constructive potential and contribute to the goals of all arguers to resolve disagreement?

2. Under what circumstances will each of the various types of attack (asking questions, identifying internal deficiencies, and so on) be the most effective choice?

Attack and Defense II

Lecture 10

General methods of refutation can be used in both attack and defense. *Reductio ad absurdum* suggests that the other arguer's position leads to unacceptable implications.

Attacking arguments involves several arrangement choices. Should the attacks be organized in the same way as the arguments being attacked? Doing so will make it easier for audiences to follow the argument. But doing so may put the respondent on the opponent's ground. Building one's own organizational scheme around the central points in dispute may be more effective. In the example of the Kennedy-Nixon debates in Lecture 9, notice that Kennedy developed his own organization.

How completely should the attack be developed? The argument being attacked should be stated in a way that the audience will accept. The basis of the attack should be clearly stated. The attack should be developed and supported. The significance of what the attack has accomplished should be made clear. In the Kennedy-Nixon debate example, Kennedy omits some of these steps in the apparent belief that they will be obvious to the audience.

Strategic choices regarding the defense of an argument that has been attacked are more limited. The basic strategic options are few. One can demonstrate that the attack is inapplicable to the case, is of trivial consequence, is inadequately established, or is in error. The most basic choices, however, are made in the original presentation of the argument, that is, taking possible attacks into account and considering how to reduce their impact.

The selection choice is not whether to respond to the attack (for that could be fatal to one's argument) but how seriously to take the attack and which of the above response strategies to use.

The arrangement choice is whether the structure of the original argument or the structure of the attack will be the dominant organizational plan. The

respondent should be careful not just to repeat the original argument without extending it or responding to the attack. He or she should also be careful not to let the attack "run away with" the argument so that the attack, rather than the argument, becomes the dominant focus.

The 1960 Kennedy-Nixon debates also illustrate strategic choices related to the defense. Remember that the original argument was that Kennedy's platform would cost more than Nixon's and that Kennedy attacked the argument by recontextualizing it, providing counterexamples, admitting some increases, and challenging Nixon's figures.

Nixon makes various choices in defending his original argument. He denies that he is misstating Kennedy's figures. He labels Kennedy's counterexamples and says that they are illusory. He denies some of the counterexamples or suggests that they are worse. Nixon neither follows Kennedy's exact order nor returns to his original argument; this is a questionable choice.

General methods of refutation can be used in both attack and defense. *Reductio ad absurdum* suggests that the other arguer's position leads to unacceptable implications. Turning the tables shows how a position claimed by one party actually benefits the other. Dilemmas suggest that the opposing arguer must choose between unattractive alternatives. Argument from residues dictates the opponent's position by eliminating all other possibilities. Argument *a fortiori* suggests that what is true of the lesser is true of the greater, or vice versa. Contradictions and inconsistencies eliminate at least one of the other arguer's positions, as well as questioning the other arguer's general credibility.

The processes of attack and defense together help to move the discussion forward. Strategic choices made by the individual arguers will waive some potential issues from consideration. Some aspects of the controversy will be settled or dropped through attack and defense. The central issues on which the dispute turns will be identified, the positions of the arguers will be clarified, and the differences between them will be recognized. ■

Essential Reading

Austin J. Freeley and David L. Steinberg, *Argumentation and Debate: Critical Thinking for Reasoned Decision Making*, chapter 14.

Richard D. Rieke and Malcolm O. Sillars, *Argumentation and Critical Decision Making*, pp. 225–248.

Supplementary Reading

J. W. Patterson and David Zarefsky, *Contemporary Debate*, pp. 70–85.

Questions to Consider

1. How can one devise arguments that will take into account possible attacks and thereby minimize the need for substantial defense later?

2. Is the military metaphor (attack and defense) the best way to describe the processes of refuting and rebuilding cases? What are its implications? Is there a better alternative characterization of these processes?

Language and Style in Argument

Lecture 11

This lecture is really built around a fairly obvious claim that has implications that are not quite so obvious, and that is that arguments are cast in language. The sorts of arguments that we have every day are not reducible to the symbols of mathematics or formal logic—all A is B, all B is C, if P then Q, and so on.

Language is a resource in everyday argumentation. Arguments are cast in language and are not reducible to the formulas of formal logic. Language is an intrinsic aspect of the argument, not something that is added for ornamentation. Arguers make choices about language, which serves as a strategic resource.

Definitions are a strategic resource for the arguer and serve many purposes. They characterize common usage. They make vague terms more precise. They can also invent new usage. Of special interest to argumentation is the persuasive definition. This is a form of slanting in which a definition is used to gain an argumentative advantage. Such a definition alters the meaning of a term by associating it with a term of clear positive or negative connotation. It transfers emotional meaning from one denotation to another. There are many contemporary examples, such as the "death tax" for the estate tax, the "nuclear option" for a Senate rules change to limit filibusters, and "partial-birth abortion" for a specific medical procedure.

Definitions are used in argumentation to alter the scope of the conflict. The would-be loser may redefine the conflict to enlist the effort of others who previously have not been involved. Sometimes, conversely, definitions may be used to restrict the scope of the argument by excluding otherwise interested parties.

Definitions should be clear enough to avoid common fallacies of meaning. Equivocation is the use of the same word to convey different meanings in the same argument. Ambiguity results when we cannot be sure which of a set of possible meanings of a term is the intended meaning. Amphiboly

results when we cannot be sure which of a set of possible meanings of a phrase is the intended meaning. Vagueness is a situation in which a term or concept is indeterminate as to meaning. Heaps and slippery slopes are patterns in which boundaries or dividing lines, being imprecise, are treated as if they were nonexistent. These errors come about from the inexactness of language, a condition peculiar to informal argument.

Linguistic precision, however, can have argumentative implications. Imprecise language is not always undesirable. It may leave options open for later consideration.

Linguistic precision, however, can have argumentative implications. Imprecise language is not always undesirable. It may leave options open for later consideration. It may allow parties with divergent interests to agree on a goal but to do so for different reasons. Strategies are available to make language less precise. Euphemisms can serve this purpose. Ambiguity, equivocation, and vagueness—previously identified as fallacies—can be used intentionally to achieve this purpose.

Strategies are available to make language more precise. An arguer can use stipulative or operational definitions to this end. He or she may also draw analogies to other arguments or name the argument to increase the precision of language.

Figures of speech, rather than being merely ornamentation, also have argumentative implications. They may increase the presence of a concept. This involves making it more salient, bringing it to the foreground of consciousness. Presence makes the abstract concrete and evokes realities that are distant in time and space. Analogy, metaphor, and simile all function to increase presence. Other approaches to increasing presence include repetition, accumulation of details, and accent. They may suggest a choice among alternatives. The use of antithesis obviously poses a choice. Metaphors suggesting persuasive definition can be used to pose choices. They may increase communion with the audience through references to common activities or experiences.

Abraham Lincoln's "House Divided" speech illustrates the argumentative significance and effectiveness of figures of speech. In this speech, Lincoln uses the metaphor of "machinery" to refer to the means used in an imagined plot to make slavery national. He metaphorically associates the plotters with industrial "bosses," and he illustrates the unfolding of the plot with the metaphor of building a frame house. He also accumulates historical details to suggest the success of the plot so far, and he repeats the phrase "plainly enough now" to create a sense of revelation of what previously had been hidden.

From these examples, we can conclude that language and methods of composition and persuasion are not neutral. They are part of the substance of an argument, not separate from it. They affect the strategic positions and interest of the arguers, as well as the context and perspective within which arguments will be perceived. ■

Essential Reading

"Figures of Speech," in Thomas O. Sloane, ed., *Encyclopedia of Rhetoric*, pp. 309–314.

James A. Herrick, *Argumentation: Understanding and Shaping Arguments*, pp. 157–172.

Supplementary Reading

Richard D. Rieke and Malcolm O. Sillars, *Argumentation and Critical Decision Making*, pp. 291–305.

Charles L. Stevenson, *Ethics and Language*, chapter 8.

Douglas Walton, "Persuasive Definitions and Public Policy Arguments," *Argumentation and Advocacy* 37 (Winter 2001), pp. 117–132.

Questions to Consider

1. Persuasive definition has been referred to as an argumentative strategy. Can it also be a means to prevent argument by substituting a definition for a case? How can this danger be minimized?

2. What are the similarities and differences between figures of speech and deductive argument forms with respect to enhancing presence and awareness of thoughts and ideas?

Evaluating Evidence

Lecture 12

Testimony of fact or opinion is another kind of evidence. We rely on testimony about things that we cannot know directly or about which we are not qualified to have a reliable opinion. The testimony is accepted because of the credibility of the source.

Evidence represents the grounds for a claim. Several controversies illustrate the significance of evidence in the evaluation of an argument. In the fall of 2004, *CBS News* was forced to retract a story about President Bush's National Guard service because of faulty evidence. In the spring of 2005, *Newsweek* magazine retracted a story about mistreatment of Muslim detainees at Guantanamo because of insufficient evidence. In the 2000 election campaign, television networks twice called the Florida election results prematurely because of misleading evidence.

Evidence answers the question "How do you know?" or "What do you have to go on?" in making a claim. The evidence should be agreed upon by all participants. It thereby serves as a secure starting point for the dispute. If it is contested, discussion of the claim stops until the adequacy of the evidence is established—as the above claims illustrate. Settling the matter now requires a separate argument in which the original evidence functions as a claim. We must understand what is required to agree on the evidence. Sometimes there are technical rules, as in law. In ordinary usage, the test is what a critical audience would accept.

Speech-act philosophy provides an operational definition of "providing evidence." A speaker wants a hearer, who does not accept a claim, to do so willingly and freely. Both speaker and hearer realize that there are truth conditions for this claim—things that, if they could be established, would show the claim to be true. The speaker believes that some other statement, not obvious to the hearer, is such a truth condition. The speaker utters this other statement. The hearer accepts it, regards it as a truth condition for the claim, and therefore accepts the claim.

Abraham Lincoln's Cooper Union address illustrates many different types of evidence. In this 1860 address, Lincoln responds to Stephen Douglas's claim that the Founding Fathers supported his position on the issue of slavery. Lincoln accepts Douglas's premise, but then produces evidence that the Founding Fathers were actually consistent with his position, rather than that of Douglas.

Judgments of quality of the evidence are affected by unfamiliarity with the source and our opinion of the person who is using the evidence. Evidence is most influential when an audience is unfamiliar with the material and when the goal is sustained attitude change over time.

Lincoln relies on historical documents, a kind of tangible object. He uses shared historical understanding, a variety of social consensus. He relies on the credibility of the "founding fathers," as stipulated by Stephen Douglas. He accumulates examples of specific founders and their views. He refers to congressional organization of the Southwest Territory, where Congress did not prohibit slavery, but did regulate it. He talks about the prohibition on importing slaves into Louisiana Territory. He refers to the Missouri Compromise. All of these arguments illustrate congressional regulation of slavery, which Douglas claimed the Founding Fathers opposed. Thus, Lincoln concluded that the majority of the signers of the Constitution believed that Congress had the power to regulate slavery—a position opposed to Douglas's use of the Founding Fathers.

Common types of evidence can be grouped under the headings of examples, statistics, tangible objects, testimony, and social consensus. Examples include brief mentions of an instance, without any development. They also include illustrations, which are fully developed instances. Generalizations from the examples may be either stated or implied. Although one can argue about whether the examples support the generalization, the truth of the examples themselves must be accepted before the argumentation can proceed.

Statistics are another form of evidence. Raw numbers are the simplest statistics. Percentages, ratios, and index numbers are other statistics.

Statistics also include measures of central tendency (the mean, the median, and the mode) and statistical measures. Probability statements (including the outcomes of controlled studies and experiments) are yet another form of statistics. Each of these statistical forms is subject to tests of its accuracy, because the truth of statistics must be accepted for them to function as evidence in arguments.

Tangible objects are another form of evidence. These objects figure prominently in criminal law, as in the importance of finding the murder weapon, for instance. Sometimes they are important historically, as in the discovery of ancient artifacts. The significance of tangible objects is captured in the adage that a picture is worth a thousand words. Sometimes, though, words will be tangible objects—as in the example of a historical document.

Another type of evidence is testimony of fact or opinion. We rely on testimony about things that we cannot know directly or about which we are not qualified to have a reliable opinion. The testimony is accepted because of the credibility of the source. The classical concept of *ethos* is the basis of credibility. Credibility is a function of competence (expertise), trustworthiness, good will, and dynamism.

Credibility can be established for oneself or derived from the use of other credible sources. Eyewitness access to information will make one a credible source. One can also gain credibility through background and training, or through a good track record in a particular area relevant to the argument.

Several factors can place credibility in doubt and require a separate argument to establish the evidence. Is the person an authority on this subject? Is there a clear basis on which the person reached the conclusion? Does the person have a bias or vested interest? Do credible sources disagree?

Social consensus consists of beliefs that function as if they were facts. "Common knowledge" is a type of social consensus. Other types include shared value judgments, shared historical understandings, previously established conclusions, and stipulations in a specific discussion. Differences

in core values or common knowledge will need to be resolved before social consensus can be accepted as evidence.

Although our concerns are normative, we should note that actual audiences often have looser standards for evidence. Their judgments of quality of evidence are affected by agreement or disagreement with the claim., the speaker's manner of delivery, unfamiliarity with the source of the evidence, and our opinion of the person who is using the evidence. Evidence is most influential when an audience is unfamiliar with the material and when the goal is sustained attitude change over time. ■

Essential Reading

James A. Herrick, *Argumentation: Understanding and Shaping Arguments*, pp. 101–148.

"Social Knowledge," in Thomas O. Sloane, ed., *Encyclopedia of Rhetoric*, pp. 721–724.

Supplementary Reading

Austin J. Freeley and David L. Steinberg, *Argumentation and Debate: Critical Thinking for Reasoned Decision Making*, chapters 6–7.

Robert P. Newman and Dale R. Newman, *Evidence.*

Richard D. Rieke and Malcolm O. Sillars, *Argumentation and Critical Decision Making*, pp. 123–143, 187–202.

David Zarefsky, *Public Speaking: Strategies for Success*, pp. 123–147.

Questions to Consider

1. When would each of the categories mentioned in the lecture—examples, statistics, tangible objects, testimony, and social consensus—serve as the best type of evidence?

2. If audiences have looser standards for evidence than those discussed in this lecture, what role should normative standards of evidence play in actual controversies?

Reasoning from Parts to Whole

Lecture 13

Arguments are often characterized according to their patterns of inference and warrant, and it's the inference and warrant that sometimes control the nature of the argument. In fact, there are some textbooks that instead of calling them warrants call them argument schemes, because they're really schemes for the whole layout of the argument and for its function. The next six lectures will examine specific types of inference and the warrants for them.

We are spending so much time on this topic because arguments are often organized according to their patterns of inference and warrant, and so looking at these patterns will allow us to explore the major argument schemes. Inferences show that the evidence is a basis for the claim, but they do not do so with certainty. Consequently, we need to examine two aspects of every inference. First, we need to know what the inference is and how it works. Second, we need to know some of the tests to determine whether in a particular situation it is a strong inference. We will examine six major patterns of inference—example, analogy, sign, cause, commonplaces, and form—as well as some hybrid patterns.

Library of Congress, Prints and Photographs Division (LC-USZ62-13032).

As U.S. president from 1933–1945, Roosevelt had occasion to use the warrant from example, among many other techniques of argument and rhetoric.

The warrant from example, reasoning from parts to whole, is vividly illustrated in President Franklin D. Roosevelt's December 8, 1941, war message. The evidence is a listing of many examples of Japan's simultaneous attacks on different nations or their possessions. The claim is that Japan has undertaken a surprise offensive throughout the Pacific area. The inference is that what is true of the part is true of

the whole. The warrant is that the examples are representative of Japan's intentions for war.

Generalization uses the inference from example to derive a general statement from one or more specific examples. The inference is that what is true of the part is probably true of the whole. If the enumeration were complete, this would be the case with certainty and the argument would be deductive. Because the enumeration is usually incomplete, the warrant is that the examples are representative of the whole.

[With generalization] the inference is that what is true of the part is probably true of the whole.

Generalizations usually follow one of two patterns. A statistical generalization draws a sample from a larger population and argues that what is true of the sample is true of the whole population. An anecdotal generalization cites several individual examples, then draws a conclusion about the entire category.

Each of these patterns is subject to specific tests. For the statistical generalization, the tests are sample size and representativeness. For the anecdotal generalization, the tests are number and range of examples, presence or absence of significant counterexamples, and representativeness. Any generalization should be tested for the fallacy of composition (assuming that what is true for each of the parts is necessarily true for the whole).

Classification uses the inference from example to derive a specific application from a general principle. The inference is that what is true of the whole is probably true of the part. If the general principle were derived from complete enumeration, this would be so with certainty, and the argument would be deductive. Because that is seldom the case, the warrant—as with generalization—is that the examples are representative of the whole.

The effect of classification is to increase the salience of an abstract or general claim by making it more concrete; this is the reverse of generalization. Like generalizations, classifications are subject to tests. Does the particular

member really belong in the general class? Is there reason to think that the particular member is an exceptional case, so that the general principle might not apply? Any classification also should be tested for the fallacy of division (assuming that what is true of the whole is necessarily true of each part). ■

Essential Reading

Chaim Perelman, *The Realm of Rhetoric*, pp. 106–110.

David Zarefsky, *Public Speaking: Strategies for Success*, 4th ed., pp. 163–168.

Supplementary Reading

James A. Herrick, *Argumentation: Understanding and Shaping Arguments*, pp. 188–190.

Richard D. Rieke and Malcolm O. Sillars, *Argumentation and Critical Decision Making*, 4th ed., pp. 111–112.

Questions to Consider

1. Public opinion polls often rely on very small samples. How are they able to do so and permit confident generalizations?

2. Under what circumstances is the whole not equal to the sum of the parts? Why are these circumstances likely to incur the fallacy of composition or division?

Reasoning with Comparisons

Lecture 14

We're continuing our discussion of individual patterns of inferences and warrants, because these dictate the argument schemes that enable us to organize many informal arguments.

One common form of inference is that like things should be treated alike. This is reasoning from analogy. Analogies can be either literal or figurative; that is, they can be direct comparisons between things or comparisons of the relationships between things. This lecture will describe the types of analogies and the tests for this reasoning with comparisons. It will consider why logicians often consider analogy the weakest type of inference, whereas rhetoricians often consider it the strongest. Finally, we will address two special uses of the argument from analogy: the judicial analogy, in which something is cited as precedent for the matter at hand, and the argument *a fortiori* (the argument of more and less), which is sometimes called a "super-analogy."

Inferences from analogy are based on comparisons and resemblances. The inference is that one thing will be like another in the respect under discussion. Because the items being compared are not identical, this inference cannot be made with certainty; the inference is always inductive. The warrant is that things that are basically alike will be alike in the respect under discussion.

Literal analogies are direct comparisons of objects, events, situations, places, and so on. The items compared are in the same sphere of reality. The inference is that the items are like each other. The warrant is that if they are alike in most basic respects, then they will be alike in the respect under discussion. Literal analogies are used to identify parallel cases and to derive guidelines for action.

Literal analogies are often used to reason from presumably similar historical situations. The dispute at the birth of the United States about whether Britain or France would be a model for the new nation involved literal analogy. The

claim of some pro-life advocates that abortion is like slavery is based on a literal analogy.

Two special cases of literal analogy require comment. One is the judicial analogy, sometimes used in law, when one argues that a case should be decided in the same way as a precedent case. It is sometimes used as a rule of conduct, arguing that one should do what one did in a similar case.

Courtesy National Archives, NLR-PHOCO-A-48493 11.

Franklin D. Roosevelt having a fireside chat in Washington DC.

Another special case of literal analogy is the argument *a fortiori*. This argument suggests that what is true of the lesser is even more true of the greater. Or it suggests that what is false for the greater is even more false for the lesser. It is sometimes called a "super-analogy" because it compares things that are largely alike but that differ in magnitude.

Figurative analogies are comparisons of relationships among objects, events, places, situations, and so on, rather than comparisons of the things themselves. The items compared are in different spheres of reality. The form of a figurative analogy is: a is to b (theme) as c is to d (*phoros*). The theme consists of the terms to which the claim relates. The *phoros* contains the better known pair of terms in the analogy. The warrant is that the relationship between the terms in the *phoros* will also characterize the relationship between the terms in the theme. Figurative analogies are used to make ideas more concrete or acceptable by comparing them to those that are better known.

There are outstanding historical examples of the use of figurative analogies. Lincoln's "House Divided" speech, as discussed in Lecture 12, compares

the relationship among plotters in a conspiracy to that among builders of a house. Franklin D. Roosevelt's "Arsenal of Democracy" speech compares the relationship between the United States and Britain to that between neighbors, one of whose house is on fire and the other of whom has a garden hose.

Analogies always require careful testing. Because resemblances are not identities, an analogy can never be certain and is always inductive. The test is whether the essential similarities outweigh the essential differences between the items being compared. A false analogy is one that does not satisfy this test. ■

Essential Reading

James A. Herrick, *Argumentation: Understanding and Shaping Arguments*, pp. 179–188.

Chaim Perelman, *The Realm of Rhetoric*, pp. 110–125.

Supplementary Reading

David Zarefsky, *Public Speaking: Strategies for Success*, 4th ed., pp. 169–172.

Questions to Consider

1. Why is analogy a particularly potent form of argument even though most logicians regard it as weak?

2. In light of the significance of precedent, how do courts ever justify abandoning or overturning a precedent?

Establishing Correlations

Lecture 15

Sign arguments are commonly used for a variety of purposes. They are used to infer the unknown from the known. Many constructs are unknowable abstractions, such as intelligence, economic health, and happiness.

Sign inferences involve correlations—patterns, occurrences, or changes that vary in relation to each other. The basic inference is that something can be predicted from the occurrence of something else. Aristotle distinguished between fallible and infallible signs. If a sign truly were infallible, the relationship could be asserted with certainty, and the argument would be deductive. Because there are few, if any, infallible signs, the inference depends on probability and could be mistaken. The underlying warrant, therefore, is that there is a predictable relationship between the variables. Although inferences from sign assert a predictable relationship between variables, they do not account for it; they are thus less powerful than causal inferences. The prototype case of a sign relationship is a surface characteristic or property that is regarded as a sign of some deeper, underlying essence.

The "I Have a Dream" speech of Martin Luther King, Jr. illustrates a sign argument. Dr. King identifies several surface manifestations of racism with which he will not be satisfied. He then alludes to the scriptural injunction that justice roll down like waters and righteousness as a mighty stream. These statements can be reconstructed into a sign argument.

One key use of sign arguments is to infer the unknown from the known. This is particularly helpful with arguments involving unknowable abstractions. Statistical indexes and other measurements are widely used as signs of these abstractions. Another example is to infer the nature of one's personality from one's actions. Still another is to infer the nature of a regime from the norms and policies it establishes.

Sign arguments and inferences are used to predict outcomes when it is not necessary to explain reasons for the outcomes. We might observe a correlation between a practice, such as time spent on homework, and an outcome, such as scores on standardized tests. Desiring an outcome (to increase scores on standardized tests), we engage in the practice (increase the amount of time spent on homework). We cannot be sure that the practice causes the outcome; nor do we care, so long as the relationship between the two is predictable.

Sign inferences are also used to rely on the judgment of expert authorities. The assumption is that expertise is a sign of accuracy or trustworthiness with regard to the particular matters about which the expert testifies. We must be sure that the expert is speaking in his or her field of expertise, has a basis for making the statement, and is not reflecting obvious bias or vested interest.

To test inferences from sign, we can ask a series of questions. Do the sign and the thing signified generally appear together? Are there countersigns? Can a sign actually signify two or more different, even opposite, things? Is there a basis for thinking that the relationship is anything other than a mere coincidence? Has a sign relationship mistakenly been regarded as a causal relationship? ■

Essential Reading

Chaim Perelman, *The Realm of Rhetoric*, pp. 89–101.

Richard D. Rieke and Malcolm O. Sillars, *Argumentation and Critical Decision Making*, 4th ed., pp. 114–115, 117–118.

Supplementary Reading

David Zarefsky, *Public Speaking: Strategies for Success*, 4th ed., pp. 172–174.

Questions to Consider

1. Should sign inferences be used only when causal inferences are unavailable, or are there any conceivable reasons to prefer sign inferences over causal inferences?

2. When using sign inferences to rely on the judgment of authorities, how do we establish the person's expertise in order to be able to use it as a sign of correct judgment?

Moving from Cause to Effect

Lecture 16

Causal inferences and warrants, the topic of this lecture, are warrants which both predict and explain a relationship between variables. Before we get into our analysis of these arguments, let me simply observe that discussion about public matters frequently involves causal inferences and warrants.

Causal inferences, unlike sign inferences, assert that one factor has influence over another. Influence must be inferred because it cannot be observed directly. The lecture will consider different meanings of the concept of causation, different purposes for which causal arguments are used, and different methods that have been used to infer the existence of causal influence. The reasoning process sometimes proceeds from cause to effect (as in the case of predictions) and sometimes from effect to cause (as in the case of explanations for behavior). Causal inferences follow with probability, not certainty, and the lecture will conclude by discussing some of the factors that can undermine a causal inference.

Discussion about public matters frequently involves causal inferences. Many people argued that the failure of the democracies to resist Hitler's early aggressive moves caused World War II. Some liberals in the 1960s argued that frustration with despair in the inner cities caused race riots. Some conservatives in the 1980s argued that the U.S. defense buildup under President Reagan caused the collapse of the Soviet Union. President Bush has argued that the retirement of baby boomers will cause the collapse of the Social Security system unless the system is changed.

Causal inferences both identify and explain relationships. The inference is that doing something will lead to something else. The claim would follow certainly, and the argument would be deductive, only if all other possible influences could be controlled, which is highly unlikely. Hence the argument relies on the warrant that one phenomenon has influence on another. Influence cannot be observed but is inferred.

The concept of causality is ambiguous. The term *cause* has different meanings. It may mean "sufficient condition" for the effect. It may mean "human action" or intervention in the normal order of things. It may mean "the abnormal."

The concept of causality is ambiguous. The term *cause* has different meanings. It may mean "sufficient condition" for the effect. It may mean "human action" or intervention in the normal order of things. It may mean "the abnormal."

Which meaning of *cause* is appropriate in any given case may depend on the use to which the argument is put. Causal inferences are used to predict events. They are also used to relate means to ends; this is sometimes called the *pragmatic argument*. Additionally, they are sometimes used to explain paradoxes or to assign responsibility.

Different procedures are used to determine causality. Empirical approaches rely on the tests for sufficient condition developed by John Stuart Mill. In these tests, one first creates conditions in which two things are identical in every respect except one. Then, one observes whether there is a difference between the two things. If so, one infers that the one respect in which the two things varied is the cause of the difference.

Quantitative approaches rely on statistical regression analysis, which explains how much of the variance between things is attributable to each factor identified. Rhetorical approaches rely on a two-stage argument to back up the inference. The first step is to identify how some factor possibly could be the cause. The second step is to explain why it ought to be considered the cause. When human action is involved, the first step establishes means and opportunity; the second step establishes motive.

Causal inferences should satisfy several tests. Has a correlation been confused with a causal relationship? Is there some common cause that is masked by the appearance of a cause-effect relationship that is spurious? Has temporality been confused with causality (the *post hoc* fallacy)? The

cause must precede the effect. Preceding the effect, though, is not a sufficient condition for something to be a cause.

Are there significant multiple causes or multiple effects? An effect might have multiple causes, in which case treating only one of them might not alter the presence of the effect. A cause might have multiple effects, in which case influencing all of them might produce unintended consequences. Have cause and effect been reversed?

Are there significant intervening or counteracting causes? An intervening cause is one that mediates or deflects causal force. A counteracting cause is one that reverses causal force. Either will reduce the causal force that is brought to bear on the alleged effect. ■

Essential Reading

James A. Herrick, *Argumentation: Understanding and Shaping Arguments*, pp. 199–211.

Chaim Perelman, *The Realm of Rhetoric*, pp. 81–89.

Supplementary Reading

Richard D. Rieke and Malcolm O. Sillars, *Argumentation and Critical Decision Making*, 4th ed., pp. 113–114.

David Zarefsky, *Public Speaking: Strategies for Success*, 4th ed., pp. 174–179.

Questions to Consider

1. Why are we often eager to establish causality even though it can be known only by inference?

2. Is the process for rhetorically establishing causality too rigorous or not rigorous enough? Is there a danger that we will reject true causes or accept false causes? If so, how might this danger be minimized?

Commonplaces and Arguments from Form

Lecture 17

Now, there are two more of these basic patterns of inference and warrant that will be the focus of this lecture: commonplaces and arguments from form. They seem to be very different from each other, but as we will see at the end, they have a very important feature in common.

This lecture considers both inferences that are based on social knowledge (commonplaces) and inferences that resemble deductions but are not (arguments from form). Commonplaces are beliefs or judgments that an audience generally accepts as being true. Often these come in pairs of seemingly opposed terms (such as quantity and quality or pragmatism and principle) with each term sometimes being preferred. Arguments from form include dilemmas, arguments from hypothesis, and arguments from probabilities. Inferences of this type are not strictly deductive but gain their power from a form that resembles deduction.

Commonplaces are general categories of inference that usually have proved to be reliable. They represent beliefs or values that are commonly accepted within a given culture. The inference is that the connection between evidence and claim is commonly accepted. The term for this structure of argument is *enthymeme*. It resembles a syllogism, except that at least one of its premises is drawn from the beliefs or values of a particular audience, rather than from statements that are independently established to be true.

These inferences are not certain, however, because the generally accepted beliefs, ironically, may be contested. We accept certain beliefs that are at odds with other beliefs that we also accept, such as the value of coordination and the value of decentralization. We sometimes privilege values that are at odds with other values that we sometimes privilege. Therefore, the underlying warrant is the particular belief or value that is being appealed to in the particular case. Notice that social consensus can function as evidence, as described in Lecture 12, and also as a warrant, as discussed here.

Some types of commonplaces reflect shared beliefs. Maxims and adages, beliefs about the essential nature of a thing, and widely shared values are all sources of commonplaces. Ironically, commonplaces not only can be contested, but there also can be conflict about these supposedly consensual beliefs.

Inferences from form rely on the structure of the argument itself. These are argument forms that resemble deductions, in which the conclusion follows with certainty; used in ordinary argument, however, they are probabilistic.

We often find commonplaces in presidential rhetoric. For example, President Reagan made statements such as "Why shouldn't we be optimistic about the future? After all, we are Americans." Here Reagan is appealing to the commonplace that Americans can do whatever they set their minds to do. An exception that proves the rule was President Carter's "Crisis of Confidence" speech in which he violated the commonplace belief by referring to limits to what Americans could do. As a result, his speech did not go over well.

Some commonplaces reflect preferences for one or the other of opposed values. The value conflict between pragmatism and principle is a source of commonplaces. The argument from pragmatism is that we should decide between choices on the basis of their consequences. The argument from principle is that we should decide based on enduring beliefs without regard to pragmatic consequences. In different circumstances, each of these preferences could trump the other, as arguments about the war in Iraq have illustrated over time.

The value conflict between quantity and quality is a source of commonplaces. The argument from quantity is based on achieving the greatest good for the greatest number at the least cost. The argument from quality is based on the value of the unique. Again, in different circumstances, each of these preferences could trump the other, as arguments about funding priorities demonstrate. Notice how in each case one value is put forward as a decision

rule but is answered by a contrary decision rule; hence the controversy will center on which is more applicable to the case at hand.

Inferences from form rely on the structure of the argument itself. These are argument forms that resemble deductions, in which the conclusion follows with certainty; used in ordinary argument, however, they are probabilistic. The inference is that the form justifies acceptance of the conclusion. But the form does not completely match a deductive argument, despite its seeming resemblance. Hence there is an underlying warrant that the form should be accepted in the specific case at hand. These arguments are sometimes called "quasi-logical."

The dilemma appears to resemble the disjunctive syllogism. We are presented with alternatives, each of which will lead to unattractive outcomes. The seeming completeness of the options becomes the basis for the inference. The question is whether there are other alternatives, in which case the dilemma is false.

The argument from hypothesis appears to resemble the conditional syllogism. This argument begins with a hypothesis and predicts what will happen if the hypothesis is true. The hypothesis is tested and observed findings are compared with hypothesized outcomes. Findings that seem to confirm the hypothesis may have come about regardless of the hypothesis; to assume otherwise is to commit the fallacy of affirming the consequent. The question is whether, in a given context, one explanation is stronger than another.

Another example of inferences from form is reasoning from comparisons, which appears to resemble mathematical computation. Many arguments appear to be mathematical, but really are not. For example, we can discuss terms such as more and less without a really measurable unit. When President Reagan asked "Are you better off today than four years ago?" he was invoking this kind of argument. There is no precise way to measure "better off." This lack of a precise way to measure is also true for other kinds of seemingly mathematical arguments, such as transitive arguments and arguments from sacrifice.

Inferences from form and commonplaces both resemble deduction, but they depend on interpretation, and, therefore, should be subject to strict scrutiny. ■

Essential Reading

James A. Herrick, *Argumentation: Understanding and Shaping Arguments*, pp. 217–236.

Chaim Perelman, *The Realm of Rhetoric*, pp. 53–80.

Supplementary Reading

Ray D. Dearin, "Perelman's Concept of 'Quasi-Logical' Argument: A Critical Examination," in J. Robert Cox and Charles Arthur Willard, eds., *Advances in Argumentation Theory and Research*, pp. 78–94.

Thomas B. Farrell, "Knowledge, Consensus, and Rhetorical Theory," *Quarterly Journal of Speech*, 62 (February 1976), 1–14.

Alan G. Gross and Ray D. Dearin, "Arguing Quasi-Logically," in *Chaim Perelman*, pp. 43–52.

Questions to Consider

1. How in any given instance can one best resolve conflicts between values or beliefs that both enjoy social consensus?

2. Why would formal structure give inferences from form special authority? Can the form of an argument be distinguished from its substance?

Hybrid Patterns of Inference

Lecture 18

We have now considered six basic patterns of inference: example, analogy, sign, cause, commonplaces, and form. We have talked about how they work and some of the tests that they must meet. But, there are some argumentation textbooks that will identify as many as 20 or 30 different patterns of inference or, as they are sometimes called, argument schemes. Often, these are combinations of the basic six building blocks, the hybrid patterns of inference.

Reasoning with rules is a hybrid pattern of inference. A statement of a rule functions as a commonplace. It is an "if-then" statement. Its typical form is "if conditions X arise, then Y is either required, permitted, or forbidden." Like any conditional statement, it contains antecedent and consequent clauses. It also contains an indication of the force of the rule. It is treated as an established principle. The rule mediates between a statement of factual conditions and a statement of what should be done; it facilitates case-based (or casuistic) reasoning.

The statement of the facts is used analogically. The inference is that the rule applies in the case at hand. The warrant is that conditions in the case at hand match those contemplated by the rule. Because the rule was framed from a consideration of specific cases, the case at hand is claimed to be essentially like those cases. The judicial analogy is employed—like cases should be treated alike. Reasoning from the rule to the case also exemplifies classification, reasoning from the whole to the part. Famous court cases *Brown v. Board of Education*, *Roe v. Wade*, and *Bush v. Gore* illustrate this hybrid inference pattern.

Determining whether rule-based reasoning is valid involves certain tests. Do the factual conditions of a given case satisfy all the requirements of the rule? Have all relevant aspects of the situation and context been considered? Is the rule being applied unthinkingly or with misplaced literalism? When the rule

itself is contested, it must be justified by some antecedent rule, with a similar hybrid reasoning pattern.

Arguing about values is another hybrid pattern of inference. Arguing about values is difficult. Values can be highly personal and intense, and they can relate to our basic worldview. But not being able to argue about values is also dangerous, because that confines us to the two "dogmas" discussed in Lecture 4. Arguments about values frequently involve conflicts between values or value hierarchies rather than disagreement about whether a given value is good or bad. There are several major ways in which contested values can be defended.

- One value might be argued to subsume the other, hence permitting us to enjoy both.
- One value might be argued to be more likely, or to offer a greater benefit, or both.
- One value might be preferred because foregoing it is irreparable.
- One value might be argued to better promote some other value that is shared by the arguers.
- One value might be argued to be better supported by authoritative texts.
- One value might be argued to be better supported by respected people.
- One value might be argued to lead to more desirable consequences than the other (this is the pragmatic argument).

How is arguing about values a hybrid inference pattern? It employs inferences from form (quasi-mathematical relationships) in seeking to compare values. It also employs causal argument in a discussion as to what adopting one or the other value will lead.

This hybrid inference pattern is illustrated by several contemporary moral issues including the controversies over stem-cell research and over end-of-life decision making.

Sometimes there is not any bedrock base of agreement to which the arguers can appeal. In those cases, the argument functions for each participant as a way to clarify his or her own values. But the conclusion that there is no basis for agreement should be the last resort of the arguers, not the first.

Dissociations are another hybrid inference pattern. The manner in which President Lyndon Johnson introduced the idea of affirmative action into public discourse illustrates a dissociation. Johnson took what had traditionally been regarded as racial equality and said it was only the appearance of equality. He described his own vision as true equality. He defended his description by figurative analogy.

The case of President Johnson should show how this inference is a hybrid. The *phoros* of the analogy is accepted as a commonplace. Analogical reasoning is also employed. The argument also contains a sign inference (one thing is claimed to be a better sign of equality than another).

Dissociation involves two analytical steps. A previously unambiguous concept with a single, accepted meaning (such as equality) is divided into two concepts, one of which is valued more positively than the other. One's adversary's position is associated with the less valued concept and one's own position with the more valued concept.

The division is accomplished by applying a philosophical pair to the previously unitary term. A philosophical pair consists of two contrasting concepts expressed as a fraction in which the denominator is the preferred term. Examples include appearance/reality, letter/spirit, and opinion/truth. In ordinary discourse, there are clues to suggest that a dissociation has been employed. These clues include the presence of an apparent tautology or of an apparent paradox or oxymoron, or the use of terms such as *pseudo-, quasi-, so-called,* and the use of quotation marks around a term.

A dissociation can advance a controversy by changing perceptions of the argument in order to get beyond a seeming impasse.

Determining whether a dissociation is a reasonable inference involves certain tests. Are the two parts of the concept really distinct? Are the fractions in the philosophical pair in the correct relationship? Does the dissociation really reframe the controversy?

At this point we will recapitulate our study of inference patterns.

- Inferences from example relate parts to wholes.
- Inferences from analogy involve comparisons.
- Inferences from sign establish correlations.
- Inferences from cause trace influence.
- Inferences from commonplaces apply social knowledge.
- Inferences from form rely on an argument's structure.
- There are also hybrid inference patterns like the ones we have been discussing in this lecture.
- For each of these inference patterns, there are questions to raise and tests to employ in order to determine whether an argument is valid. ■

Essential Reading

Gidon Gottlieb, *The Logic of Choice: An Investigation of the Concepts of Rule and Rationality*, chapter 2.

Chaim Perelman, *The Realm of Rhetoric,* pp. 126–137.

Supplementary Reading

Andrea A. Lunsford, John J. Ruszkiewicz, and Keith Walters, eds., *Everything's an Argument,* 3rd ed., pp. 78–87.

Questions to Consider

1. How can court decisions be controversial or subject to argument if they apply established rules to agreed-upon facts?

2. What, if any, role can hybrid inference patterns play in addressing deeply divisive moral questions such as abortion?

Validity and Fallacies I

Lecture 19

We evaluate arguments as good or bad, strong or weak; and we do that because we want to know not just what does convince people, but what should convince people. Or, to put it another way, what would convince people if they were exercising their critical judgment in reasonable fashion. So, there is an inherently normative component to argumentation, as well. This is called argument appraisal, and the next two lectures will deal with that.

The central question of this and the next lecture is "what makes a good argument?" Traditionally, the answer is seen to be a matter of validity. In formal reasoning, validity is purely a matter of structure and is completely unrelated to the content of the argument. In informal reasoning, it means following patterns that experience generally has shown to lead to good results and avoiding fallacies (reasoning patterns that often lead people astray). This lecture will examine errors specific to each particular pattern of inference, and deficiencies in clarity, which result from the use of unclear language. It then will consider general errors of vacuity ("empty" arguments). We will consider how each of these misuses of reasoning can cause an argument to go astray.

In formal logic, validity is a matter of form, not content; it has nothing to do with the truth of any of the statements in the argument. An argument is valid if, when the evidence is true, the claim must be true. The necessity of this relationship allows us to say that the claim follows from the evidence.

An argument will be invalid in formal logic if it fails to follow the rules for a particular inference pattern. A categorical syllogism, as we have seen, will be invalid if the middle term is undistributed or if either of the end terms is distributed only once. Also, no more than one premise may be negative. A conditional syllogism will be invalid if it affirms the consequent or denies the antecedent. A disjunctive syllogism will be invalid if it confuses the exclusive and nonexclusive senses of *or*.

In formal logic, an argument that is *invalid* is *fallacious*. In common usage, *fallacy* is often used to mean anything that is wrong with an argument. More precisely, a *fallacy* is a deficiency in the form of an argument that is not immediately apparent.

Beyond the realm of formal logic, applying the concept of validity is tricky. Because the claim does not follow from the evidence with certainty, we cannot say that, if the evidence is true, the claim *must* be true. Yet informal reasoning seeks to achieve the function served by validity: a content-free check on the process of reasoning. This function is achieved by focusing on experience rather than form. A subject-matter field will generate its own ways of testing and weighing claims and evidence. A general tendency develops over time for certain reasoning patterns to produce good or bad results. The specific situations in which arguers find themselves may also provide standards of reasoning.

A *non sequitur* is an argument in which, on the face of it, no connection exists between the claim and the evidence.

For informal reasoning, there are also standards for each pattern of inference, but they are matters of experience rather than form. For inferences from example, valid arguments are those that avoid key pitfalls.

- They avoid hasty generalizations.
- They avoid unrepresentative samples.
- They avoid the fallacy of composition.
- They avoid the fallacy of division.

For inferences from analogy, valid arguments are those in which essential similarities are greater than essential differences.

For inferences from sign, valid arguments meet specific tests.

- The sign and the thing signified generally occur together.
- The sign does not appear by itself, without the thing signified.
- There are not obvious countersigns.
- The same sign does not herald opposite things.
- The relationship is not mere coincidence.
- Sign is not confused with cause.

For inferences from cause, valid arguments will avoid several errors.

- They avoid confusing sign with cause.
- They avoid failing to identify a common cause.
- They avoid confusing temporality with causality.
- They avoid confusing cause with effect.
- They do not ignore multiple causes or multiple effects.
- They do not ignore intervening or counteracting causes.

Valid inferences from commonplaces will show that the commonplace applies to the situation at hand more than do any competing commonplaces. For inferences from form, valid arguments are those that recognize the difference between the appearance of deductive form and the probability (rather than certainty) that the form is correct.

We also have seen that some fallacies are deficiencies in clarity. These result from the inexactness of language, a condition peculiar to informal argument. Equivocation is the use of the same word to convey different meanings in the same argument. Ambiguity results when we cannot be sure which of a set of possible meanings of a term is the intended meaning. Amphiboly results when we cannot be sure which of a set of possible meanings of a phrase is the intended meaning. Vagueness is a situation in which a term or concept is indeterminate as to meaning. Heaps and slippery slopes are patterns in which boundaries or dividing lines, being imprecise, are treated as if they were nonexistent.

Additionally, some fallacies are the result of vacuity. These result from failure to provide necessary proofs, leaving "holes," or empty spaces, in the argument. Circular reasoning occurs when the evidence either restates the claim or logically presupposes the claim. Begging the question occurs when a claim made is dependent on other claims that are implicitly assumed but are not established in the argument. Ignoring the question is the result of a digression or a focus on matter extraneous to the situation at hand; the irrelevant material that is introduced is sometimes called a "red herring."

A *non sequitur* is an argument in which, on the face of it, no connection exists between the claim and the evidence. A "straw man" has been attacked when one's argument responds to a claim that has not been made and that is not in dispute, rather than to the claim that really is the focus of the dispute. A self-sealing argument is one that does not admit of any possible testing or falsification because it can encompass seemingly opposite results. ■

Essential Reading

"Fallacies," in Thomas O. Sloane, ed., *Encyclopedia of Rhetoric*, pp. 295–301.

Frans H. van Eemeren et al., *Fundamentals of Argumentation Theory: A Handbook of Historical Backgrounds and Contemporary Developments*, chapter 8.

Supplementary Reading

Robert J. Fogelin and Walter Sinnott-Armstrong, *Understanding Arguments: An Introduction to Informal Logic*, 5th ed., pp. 3–47.

Austin J. Freeley and David L. Steinberg, *Argumentation and Debate: Critical Thinking for Reasoned Decision Making*, 10th ed., chapter 10.

Ray E. McKerrow, "Rhetorical Validity: An Analysis of Three Perspectives on the Justification of Rhetorical Argument," in William L. Benoit, Dale Hample, and Pamela J. Benoit, eds., *Readings in Argumentation*, pp. 297–311.

Questions to Consider

1. How can judgments of an argument's validity be separated from judgments about the truth of its claims?

2. If one were to encounter an argument containing any of the fallacies discussed in this lecture, what would be necessary to purge the argument of its fallacious character and thereby reclaim the argument?

Validity and Fallacies II

Lecture 20

There is one more category of validity test, and again, we can talk about several examples of these. One of the most common has the name ad hominem or "against the person." Ad hominem arguments are usually defined as those in which an attack on a person is substituted for a response to an argument.

This lecture continues the discussion of general errors in reasoning that was begun in Lecture 19 with the treatment of vacuity. We will examine deficiencies in relevance, those that involve inferences from factors that have nothing to do with the relationship between evidence and claim. Following this discussion of fallacies, the lecture will conclude by briefly reviewing two challenges to the traditional understanding of fallacies. One of these suggests that arguments are valid or fallacious depending on their context; the other suggests that fallacies should be understood as errors of procedure rather than form.

Some fallacies are deficiencies in relevance. These result from introducing a factor that has nothing to do with the relationship between the evidence and the claim. *Ad hominem* arguments are usually defined as those in which an attack on a person is substituted for a response to an argument. (This definition will be modified below.) If these arguments are defined in this manner, then they may be seen as part of the category that includes fallacies with deficiencies in relevance. Some additional fallacies based on deficiencies in relevance are listed below:

- Appeals to authority may be fallacies if they substitute for argument, if the authority is outside the area of his or her expertise, or if the authority has no basis for reaching conclusions.

- Appeals to popularity ("bandwagon effect") substitute the fact that others support an idea for an argument in its behalf.

- Appeals to tradition can be used to block consideration of change without engaging the argument.

- Appeals to ignorance assume that a claim must be true (or false) because the opposite position cannot be disproved (or proved).

- Appeals to inappropriate emotion prevent argument through expressions of anger, fear, or other emotions impervious to argument.

- Threats coerce a conclusion in order to avoid force, not because of the power of the argument.

Although the above patterns are conventionally described as fallacies because they are deficient in relevance, in fact, circumstances exist under which they may be considered perfectly reasonable arguments. The argument from ignorance illustrates how this can be so. Appeals to ignorance are a fallacy if we make decisions based on ignorance. But we often have to make decisions without knowing everything we need to know. We create a presumption that says, in the face of uncertainty, the decision ought to be weighted one way or another: Because we don't know X, we should do Y. This is a fallacy, yet many would not view it as such. In his 2003 speech to the United Nations Security Council, Colin Powell argued that, because we did not know if Iraq had destroyed the weapons of mass destruction it once had, we should conclude that it still had them.

Likewise, the *ad hominem* argument is not always seen as fallacious. Several different types of argument are grouped under the name *ad hominem.* The bad character (or "abusive") type of argument asserts that the person is an untrustworthy source for the claim. The circumstantial type asserts that the person's own conduct or other beliefs and commitments are at odds with the claim he or she asserts. The bias type asserts that the person has some prejudice or vested interest that prevents him or her from being an impartial source.

Each of these types might be a perfectly appropriate argument, depending on the circumstances. If a claim depends on the good judgment of a source, then questioning trustworthiness is highly relevant. If one's sincerity is called into question or if one maintains a position inconsistently, the confidence that another person has in that position will—and should—be reduced. Although epithets are usually undesirable, establishing the bias of a source may discredit an inference based on the source's testimony. What we have seen about the *ad hominem* is true for most of the informal fallacies: They may be valid arguments or they may be fallacies, depending on the situation and context.

Some fallacies are deficiencies in relevance. These result from introducing a factor that has nothing to do with the relationship between the evidence and the claim.

Another approach to reconsidering the fallacies focuses not on their structure but on their function. Arguments occur in discourse in which the goal is to resolve disagreement (although this goal does not necessarily mean settling all disputes). Under this approach, a fallacious argument is one that undermines efforts to resolve disagreement; it is a procedural rather than a formal violation. Principles for effective resolution can be established, such as those put forward by the Dutch scholars van Eemeren and Grootendorst, so that violations of the principles can be deemed fallacious. In the absence of such specific rules, the question to ask of any argument is whether it fulfills the purpose of resolving disagreement.

From these principles, we can identify examples of fallacious arguments. Declaring a standpoint sacrosanct removes the necessity to defend it. Putting pressure on the opponent may stifle an objection that would require that a defense be presented. Introducing irrelevant matters causes the discussion to lose focus on the standpoint being considered. Falsely presenting a premise as self-evident makes it appear uncontroversial and, hence, not open to challenge. Exploiting prejudice of the opponent diverts the discussion from the standpoint at issue. Using language to obfuscate violates the rule to be clear. In general, an argument is fallacious not because of its inherent structure or the context of its use, but because it violates one or more of these procedural rules.

Arguments are appraised both by impartial analysts and by the arguers themselves. An impartial analyst can reconstruct the dispute and examine arguments in relation to the principles of critical discussion. The arguers can increase the likelihood of presenting valid arguments by imagining that they are addressing a universal audience, composed of all reasonable people, and, hence not exploiting the specific commitments or prejudices of a particular person. ■

Essential Reading

Frans H. van Eemeren et al., *Argumentation: Analysis, Evaluation, Presentation*, chapters 7–8.

Douglas Walton, *A Pragmatic Theory of Fallacy*, chapters 1 and 8.

Supplementary Reading

"*Ad Hominem* Arguments," in Thomas O. Sloane, ed., *Encyclopedia of Rhetoric*, pp. 1–4.

Austin J. Freeley and David L. Steinberg, *Argumentation and Debate: Critical Thinking for Reasoned Decision Making*, 10th ed., chapter 10.

Ralph H. Johnson, *Manifest Rationality: A Pragmatic Theory of Argument*, chapter 6.

Questions to Consider

1. Why are the fallacies discussed in this lecture not *always* deficiencies in argument? How can they be dependent on context and still be fallacies?

2. Must arguers share the same purpose? If not, how can one determine whether specific arguments violate procedural standards?

Arguments between Friends

Lecture 21

We have considered the structure of simple and complex arguments—case construction, attack, defense, and the analysis and appraisal of individual arguments—I want now to turn to the different settings in society in which argumentation takes place and the ways in which those settings affect the content and the practice of argumentation. As you probably realize, this is not a matter in which formal logic has any interest at all.

The organizing principle is the concept of spheres of argument, distinctive sets of expectations that provide contexts for arguing. After introducing the idea of spheres and distinctions among the personal, technical, and public spheres, this lecture will concern the personal sphere. In this sphere, dialogue is the mode of discourse, and participants seek to resolve their own disagreements. The ideal of a critical discussion is proposed, and coalescent argumentation is described as a way to approach the ideal. Practices that diverge from this ideal are noted and possibilities for repair are considered.

In a pluralistic society, argument takes place in different spheres of activity. This decentralization is a consequence of the absence of universal standards for argument evaluation and the resulting dependence on context. Spheres identify accumulated expectations that provide contexts for arguing. Spheres differ along the public/private dimension.

- Argument in the personal sphere is of concern only to the people involved. These people also serve as the evaluators of one another's argumentation.

- Argument in the technical sphere is conditioned by background and expertise in a particular field and is accessible to those in the field.

- Argument in the public sphere is concerned with matters that affect people generally in their role as citizens; in principle argument in this sphere is open to all.

Migration of arguments from one sphere to another is common. Formerly personal matters, such as child abuse and sexual harassment, can be recast as public concerns. Economic issues and matters of defense policy have been suggested to be technical questions that need not engage the public. In some controversies, such as the proposal for school vouchers, participants seek to redirect an argument from the technical to the personal sphere. On some topics, such as abortion, the heart of the dispute is in what sphere the subject belongs.

A critical discussion reflects normative standards. Both parties wish to resolve, not merely to settle, the disagreement.

The personal sphere of argumentation has several dominant characteristics. Its focus is on how people conduct and seek to resolve disagreements that concern themselves. The primary data consist of naturally occurring talk in which overt opposition is present. Opposition exists because two or more people maintain what they take to be incompatible standpoints. Each person seeks to influence the others to accept his or her position.

Dialogue is the dominant mode of discourse. Conventions, such as taking turns, are learned through socialization and are applied instinctively. The relationship between one person and another will influence what must be said and what can be left unsaid. The exchange is private and ephemeral; the outcome is preserved only in the memory of the participants. Materials for argument are drawn from what comes readily to mind; there is no advance preparation.

Ideally, argument in the personal sphere would take the form of a critical discussion. A critical discussion proceeds in stages. First, the disagreement is identified. Then the parties agree on the means for resolving it. Next, the merits of the competing positions are explored in as much detail as is necessary. Finally, either the disagreement is resolved or the parties recognize

that no agreement is obtainable. This procedure is a model if the goal is cooperative problem solving.

A critical discussion reflects normative standards. Both parties wish to resolve, not merely to settle, the disagreement. Each party has an equal opportunity to influence the other; power or prestige does not determine the outcome. Each party is willing to resolve the dispute "on the merits," without reference to other considerations. There are no artificial constraints (such as a time limit) to the resolution of the dispute. Participants share the values of sincerity, efficiency, relevance, and clarity that are embodied in the "cooperative principle" of H. P. Grice. Participants share commitments to nonviolence, freedom of speech, and intellectual pluralism. In the last lecture, we noted that Dutch scholars van Eemeren and Grootendorst have formulated a set of principles to identify what kinds of behavior in an argument are procedurally correct if the goal is to resolve the disagreement, as it is in a critical discussion. These principles include the following:

- A party who advances a standpoint is obliged to defend it if asked by the other party to do so.
- A party's attack on a standpoint must relate to the standpoint that has actually been advanced by the other party.
- A party may not falsely present a premise as an accepted starting point nor deny a premise representing an accepted starting point.
- A failed defense of a standpoint must result in a retraction by the party that put forward the standpoint; a conclusive defense of a standpoint must result in a retraction of doubt by the other party about that standpoint.

A critical discussion uses coalescent argumentation.

- Coalescent argumentation recognizes that all parties to a dispute have goals, and it tries to find ways to meet them.

- Coalescent argumentation uses methods and techniques that enhance commonality, truth, and agreement in a goal-directed setting.

- Coalescent argumentation is the model for a situation in which the arguers care deeply about one another.

Coalescent argumentation uses a three-step procedure. The positions of the dispute partners are identified. Then the points of commonality between positions are identified and removed from further dispute. Lastly, means are sought for maximizing satisfaction of goals not in conflict and for satisfying those that are in conflict to the degree that is reasonable.

In practice, argumentation in the personal sphere often falls short of this ideal standard. How people actually argue can be determined by observing them or by examining transcripts of their conversations. Interaction is often devoted to ending, but not necessarily to resolving, disagreements. People are not disinterested in the outcome but often have a heavy investment in one result or another. People bring "baggage" that should be extraneous to the argument but affects the course of the controversy. People often treat certain beliefs as so fundamental that they cannot be challenged.

Arguments are incompletely developed and often must be read "between the lines." There often are inequalities in skill, social power, and resources available to the disputants. Nevertheless, the norm of the critical discussion is an appropriate ideal toward which interpersonal argument should strive. ■

Essential Reading

Michael A. Gilbert, *Coalescent Argumentation*, chapters 8–9.

"Politics: The Personal, Technical, and Public Spheres of Argument," in Thomas O. Sloane, ed., *Encyclopedia of Rhetoric*, pp. 629–631.

Frans H. van Eemeren et al., *Fundamentals of Argumentation Theory: A Handbook of Historical Backgrounds and Contemporary Developments*, chapter 10.

Supplementary Reading

Pamela J. Benoit and William L. Benoit, "To Argue or Not to Argue," in Robert Trapp and Janice Schuetz, eds., *Perspectives on Argumentation: Essays in Honor of Wayne Brockriede*, pp. 55–72.

Sally Jackson and Scott Jacobs, "Structure of Conversational Argument: Pragmatic Bases for the Enthymeme," in William L. Benoit, Dale Hample, and Pamela J. Benoit, eds., *Readings in Argumentation*, pp. 681–709.

Robert Trapp, "Generic Characteristics of Argumentation in Everyday Discourse," in William L. Benoit, Dale Hample, and Pamela J. Benoit, eds., *Readings in Argumentation*, pp. 185–204.

Questions to Consider

1. What incentives might arguers have to move a dispute from one sphere to another? How might this movement be resisted?

2. How can coalescent argumentation resolve disagreements while ensuring that the positions of the arguers receive careful and rigorous testing?

Arguments among Experts

Lecture 22

This time I would like to look at the second of the three spheres of argument that we have identified, and that is the technical sphere. It is in the technical sphere that argumentation takes place within specialized fields. Now, I realize I am mixing metaphors here by talking about fields within spheres, but those are the terms that the theorists and the literature have given us.

In the technical sphere, argumentation takes place in specialized fields. Fields are defined and constituted in different ways. Sometimes they are defined by their subject matter, as in the case of academic disciplines. Sometimes they are defined by their general orientation or worldview, such as behaviorism or postmodernism. Each field will have its own norms and conventions of argument, shared by its members and often inaccessible to others. These norms and conventions define the context in which argumentation takes place and agreement is sought. Placing a controversy in a certain field affects both how it will be conducted and who will be qualified to participate.

Legal argument is an example of an argument field. Fundamentally, it involves reasoning with rules. In the simplest version of legal argument, one first determines "the facts." Completion of this process is the role of the trial. One then applies the relevant rule to the facts. Then one derives a conclusion, seemingly deductively and objectively.

It is important to complicate this simplistic view because real legal argument is generally more complex than the model we have presented here. First, our notion of "the facts" may be influenced by our perception and judgment. Additionally, there may be multiple relevant rules, or there may be none at all. Moreover, even if a single rule applies to the facts of the case, the rule may be capable of multiple interpretations.

Within legal argument, certain patterns of argument are emphasized, and certain conditions are typical. Clearly defined standards exist for what counts

as evidence. Literal analogy helps to establish similarities between the terms of the rule and the case at hand. Cause is generally used to structure stories and establish responsibility for actions, while authority is used to defend warrants, and *stasis* in place is used to consider whether a controversy belongs in the legal system and, if so, where.

Specialized knowledge is required for legal argument. One needs to know how to determine the relevant rules, as well as stipulated meanings for such general concepts as burden of proof and *prima facie* case. One must also know the procedures of inference from rules that are accepted within this type of argument.

Scientific argument is an example of an argument field. The goal is to describe, predict, and explain aspects of experience in order to account for individual phenomena, predict outcomes, and develop theory.

"Normal science" applies and refines theory. It expands the reach of theory by showing that it covers new situations and explains anomalous cases. The method is hypothesis testing, with presumption set against the hypothesis, and with controls in place for alternative sources of variation. Claims are factual statements about the phenomenon. The evidence is factual statements about the theory. Warrants are formulas or regularities implicit in the theory.

"Revolutionary science" occurs when a fundamental paradigm for viewing things is called into question. Now the discussion is a kind of meta-argument, about theories rather than phenomena.

"Revolutionary science" occurs when a fundamental paradigm for viewing things is called into question. Now the discussion is a kind of meta-argument, about theories rather than phenomena. The claim is that theory X should replace theory Y. The evidence is a demonstration that the proposed alternative theory can account for the phenomena better than the current one. The warrants are the values of theory itself, such as parsimony and explanatory power.

Disputes about paradigms are settled by means other than an appeal to facts. One paradigm may be shown to subsume the other, or it may be shown to fulfill common values better than the other. One paradigm may be defeated by exposing its self-contradictory nature. These disputes often take place over extended periods of time.

Specialized knowledge is required for scientific argument. To participate effectively, one must be familiar with relevant theories and their specifications. One must also understand the design of experiments and procedures for testing hypotheses. Also, one must be able to recognize and articulate the assumptions of one's paradigm.

Managerial argument is another example of an argument field. Choices must be made under severe constraints on information and time. To guide decision making, arguers employ simplifying devices, including incrementalism, cost-benefit analyses, and "satisficing." Arguments in this field typically are about means to achieve the stated objectives or values of an organization.

Another argument field is ethical and religious argument. In argumentation in this field, the assumption is that what is right should be done, and the controversy focuses on determining what is right. Controversies frequently involve conflicts between values and between hierarchies of values.

In ethical and religious argument, values can be defended in terms of other values. They can also be defended by reference to authoritative or sacred texts. They cannot, however, be defended solely by reference to their consequences. The focus of a controversy in this field, however, may be on how we describe a given situation, because ethical or religious principles may be implicit in the description itself.

What happens when it is not apparent to what field a controversy belongs? For example, is nuclear defense strategy a scientific or a moral issue? Similarly, is abortion a religious question or a civil liberties question? And is foreign policy a strategic or a humanitarian matter?

These questions raise issues of how a controversy should proceed and who is qualified to argue. If interfield disputes are to proceed, some means of

translation must be found. "Interfield borrowing" is one option. Transferring a controversy from the technical to the public sphere is another option. ■

Essential Reading

"Argument Fields," in Thomas O. Sloane, ed., *Encyclopedia of Rhetoric*, pp. 37–40.

Richard D. Rieke and Malcolm O. Sillars, *Argumentation and Critical Decision Making*, 4th ed., pp. 144–160, 205–223.

Supplementary Reading

Thomas S. Kuhn, *The Structure of Scientific Revolutions*, 2nd ed.

Edward H. Levi, *An Introduction to Legal Reasoning.*

John Lyne, "Argument in the Human Sciences," in Robert Trapp and Janice Schuetz, eds., *Perspectives on Argumentation: Essays in Honor of Wayne Brockriede*, pp. 178–189.

Charles Arthur Willard, "Argument Fields," in J. Robert Cox and Charles Arthur Willard, eds., *Advances in Argumentation Theory and Research*, pp. 24–77.

Questions to Consider

1. What are the implications of observing that both legal and scientific reasoning appear to be deductive but actually are not?

2. Are interfield disputes more likely to be "essentially contested" than disputes that take place within a given field?

Public Argument and Democratic Life

Lecture 23

Arguments in the public sphere have two principle features. The first is that they are addressed to, and offered on behalf of, a general audience, not a specialized one. They are accessible to anybody. They are accessible to all citizens. The second feature is that they affect the community at large.

Deliberations about public policy are the province of the public sphere. Warrants are drawn from the social and political beliefs of the audience, but arguers must confront the fact that the audience is homogeneous and devise arguments that can appeal simultaneously to different political presumptions. This lecture will mention several approaches for doing so. Finally, it will also discuss the importance of a robust public sphere to negotiate tensions that are inherent in democratic argument and will offer some speculations about the current state of the public sphere.

Arguments in the public sphere have two key characteristics. They are addressed to, and offered in behalf of, a general audience; therefore, they are accessible to all citizens. They affect the community at large, not just those who are immediately present for the deliberation. The controversy starting in 2005 over the future of Social Security is an example of argument in the public sphere.

A variety of forums exist for public argument. Traditionally, such arguments were addressed to people in large public assemblies. The public forum is an imagined space that exists whenever people have the freedom to exchange ideas and certain conditions are met. A problem affects people collectively, as well as individually. Cooperative action is needed. Information is incomplete, and there is no self-evident solution, so people must exercise subjective judgment. Nevertheless, a decision is required.

In addition to such obvious venues as political campaigns and legislative bodies, the public forum may be found in locations as diverse as PTA or city council meetings, television talk shows, certain Internet discussion groups,

and letters to the editor printed in newspapers and magazines. Traditionally, the public forum is concerned with large civic and political issues (such as war and peace, taxes, and social welfare), but such issues can manifest themselves very close to home.

Warrants in public argument come from the audience's social and political beliefs. Social knowledge can serve as a warrant. As we have discussed, such knowledge is composed of normative judgments and implicit beliefs that are treated as givens. Warrants often are left out of arguments because they are assumed implicitly.

Naïve theories of attribution can serve as warrants. People naturally strive for coherence in explanations. Favorable outcomes are attributed to one's own efforts; unfavorable outcomes, to factors beyond one's control. The consequence is that arguments can reinforce political efficacy.

Naïve theories of motivation, such as conspiracy theories, can serve as warrants. Such theories explain events, even those that seemingly would disprove the conspiracy's existence. These theories coherently organize events and predict what will come next. These theories permit the dismissal of an opponent's argument on the basis of tainted motive. Each of these warrants may in practice violate normative standards for strong arguments that were established earlier.

Public argument potentially must deal with the fact that the audience is heterogeneous. For example, the public will contain elements of both liberal and conservative presumptions. The liberal presumption regards change as inevitable and believes it should be guided, regards human nature as basically good, venerates reason, and is willing to use government to promote the common good. The conservative presumption favors maintenance of existing social relations and practices, venerates tradition, believes that human nature is not necessarily good or selfless, and regards reform as often shortsighted. These beliefs coexist in the public and sometimes in the same person.

Successful public argument will draw on both the liberal and the conservative presumptions. Innovation may be portrayed as a return to tradition. Mild actions may be described in excessive rhetoric. A policy proposal may be

part of a package that contains appeals to both presumptions. In contrast, avowedly ideological argumentation usually will not succeed in the public sphere.

Certain choices about the presentation of argument characterize controversy in the public sphere. Condensation symbols and slogans achieve strategic ambiguity. A condensation symbol, such as the flag, "condenses" a wide range of divergent attitudes and emotions in a common symbol. People will endorse the symbol for different reasons, but the symbol becomes a focal point on which they unite. Slogans such as "keeping our promise to seniors" or "protecting the homeland" work in the same way.

Certain choices about the presentation of argument characterize controversy in the public sphere. Condensation symbols and slogans achieve strategic ambiguity.

Persuasive definitions play a significant role. The term substitutes for a careful, fully developed argument. Successfully applying the term to a concept or idea has the same practical effect as advancing the fully developed argument. The linking of policy proposals to ultimate terms (highly positively charged or negatively charged terms) will enhance their apparent value.

A robust public sphere is vital to democratic life. It encourages citizen participation, civic deliberation, and discerning judgment about matters of general importance. There are grounds for concern about the state of our contemporary public sphere. Increasing numbers of people claim to have little interest in public affairs. Many are put off by the complexity of important public issues. Others are satisfied with information that oversimplifies complex issues and converts them into slogans. Large numbers of people think that they are powerless to effect change in the public sphere. There is growing distrust of politicians and other public figures.

On the other hand, there are encouraging signs. Voter registration and participation increased significantly in 2004, at least in absolute numbers. Many who disdain traditional politics are involved actively in their own communities on issues that affect the public good. It may be that, rather than

just disappearing, the public sphere is becoming localized and more diverse. What it means to be a citizen may be changing but not eroding. ■

Essential Reading

Ralph H. Johnson, *Manifest Rationality: A Pragmatic Theory of Argument*, chapter 1.

Trevor Parry-Giles and Shawn J. Parry-Giles, "Reassessing the State of Political Communication in the United States," *Argumentation and Advocacy* 37 (Winter 2001), pp. 158–170.

Supplementary Reading

Jürgen Habermas, *Structural Transformation of the Public Sphere.*

Gerard A. Hauser, *Vernacular Voices: The Rhetoric of Publics and Public Spheres.*

Richard D. Rieke and Malcolm O. Sillars, *Argumentation and Critical Decision Making*, 4th ed., pp. 266–288.

David Zarefsky, *Public Speaking: Strategies for Success*, 4th ed., pp. 442–445.

Questions to Consider

1. What are the major differences between the public sphere and the technical sphere? Under what circumstances might it be advantageous to locate argument in each sphere?

2. What public policies and civic practices will best promote the health of the contemporary public sphere?

The Ends of Argumentation

Lecture 24

In the most recent group of lectures, we have looked at a group of different spheres of argumentation, the different aspects of human activity in which argument takes place. We looked at the personal, technical, and the public spheres. But in this last lecture, I want to raise an even more general question: What are the ends of argumentation? I will use the term ends in several different senses.

This lecture will consider two different meanings of the term "end." First, it will parallel the discussion in Lecture 5 about how controversies begin by examining the conditions under which they end. The bulk of the lecture, though, is devoted to "end" in the sense of larger purposes served by the process of argumentation. Its principal purpose is to serve as a means of collective judgment and decision making, and hence as an important means of governance. Argumentation also is a way of knowing, as we decide what we believe through the testing of claims. And argumentation helps to achieve the goals of a democratic society by cultivating the skills of critical thinking, reflective judgment, and active participation that were discussed in the previous lecture as vital to the maintenance of a robust public sphere.

We have considered how controversies begin and how arguments are conducted, but how do controversies end? Sometimes the parties reach a common understanding or judgment; such an end is the ideal for a critical discussion. Sometimes time runs out, and a third party renders a judgment that the participants agree to accept. Sometimes the controversy is overtaken by events that either render it moot or point the way toward resolution. Sometimes a conceptual breakthrough occurs that results in looking at the situation from a different perspective.

Sometimes the controversy will continue. The same underlying dispute may be raised repeatedly by different surface concerns. The concepts may be

"essentially contested," gaining meaning only in relation to their opposites, in which case the controversy is perpetual.

One end of argumentation is to serve as a means of collective judgment and decision making; this purpose is its most obvious one. Much of human affairs is uncertain and contingent, yet decisions are required. Argumentation justifies decisions under conditions of uncertainty. It subjects ideas to rigorous testing. Rigor is achieved through a seemingly adversarial process, although the goal is shared, and the activity is fundamentally cooperative. The result is to ground decisions in good reasons—reasons that withstand the scrutiny of critical thinkers. Tests of claims are successive, not final. The outcomes of argumentation are commitments that people are willing to make and defend but also to revise if circumstances change.

Argumentation is also a way of knowing. The pragmatist philosopher Charles Peirce identified four ways of knowing. Tenacity is the method of chance; one sticks to the first beliefs one gets. Authority involves the uncritical acceptance of a prominent person's beliefs. *A priori* correspondence means that beliefs are deduced from self-evident premises. Verification is the method of science.

Verification has advantages over the other three methods. It is open to public inspection. It can be replicated by others. Results are obtained by design rather than by accident. But if verification were the only acceptable path to knowledge, then we would be unable to know about some of the topics that concern us most. There would be no way to know about values, probabilities, predictions, or recommendations for action.

The alternative is to look for analogues that achieve many of the same purposes as verification and that apply to these topics.

Argumentation is such an analogue.

- There is mutual agreement on the procedures to be followed.
- The norms of candor and sincerity are shared.

- Reflective judgment is the goal.

- The knowledge that one's views may be challenged creates an incentive to search for arguments of high quality.

This view that argumentation is a way of knowing has two important corollaries. In the realm of the uncertain, truth is relative to the argument that is advanced for it. We know through interaction with others; if the self is a composite of what we know, it is developed through interaction with others.

Argumentation achieves the goals of a democratic society. Aristotle was one of the earliest thinkers to identify the social function of argumentation.

- It prevents the triumph of fraud and injustice.

- It is a means to instruct audiences when scientific instruction is of no avail.

- It makes us argue out both sides of a case, thereby discovering the strength of each position.

- It is a means of self-defense.

Today, argumentation is often described as a necessary instrument of a free society by cultivating a vital public sphere. A historical summary of the U.S. experience will help to make clear what that means. The 18th-century Enlightenment valorized reason. It was seen as the dominant faculty of the mind. Expressions of opinion were seen as the path to truth. Of course, who could participate in public affairs was severely limited.

The gradual enlargement of the public during the 19th century was not accompanied by any great change in the value given to reason.

- Restrictions on voting were gradually removed.

- Access to education was widened.

- A growing emphasis was seen on grassroots democracy and participation at the local level.

- The earlier commitment of the power of reason was sustained.

Trust in the power of reason was shattered during the early 20th century. Social science dealt more with empirical realities than with normative claims. Freudian psychology emphasized unconscious motivation. Crowd psychology focused on how people behave differently when they are grouped together. Disillusionment that followed World War I fueled awareness of the power of propaganda.

During the 1920s, it became fashionable to argue against the competence of public judgment. Walter Lippmann, for example, maintained that public opinion had been disastrously wrong at the critical junctures of history. The reason, he claimed, was a commitment to the false ideal of the competent citizen.

More recently, Lippmann and others have suggested that it is possible to cultivate a "public philosophy" that reinstates the place of reason in civic discussion. The public philosophy requires awareness of society's social knowledge. It requires advocates who are able to "stand in" for the public and speak on its behalf. Making claims on behalf of the public demands that the advocate make strong claims and defend them ably. Training in argumentation helps one to prevent weak claims from triumphing over strong ones. Argumentation legitimizes freedom of speech and, thereby, permits a free society to function.

Some brief concluding observations are in order. Even the most mundane cases of argumentation participate in these larger purposes to a greater or lesser degree. Understood in this light, a "culture of argumentation" is something to be embraced rather than despised. ■

Essential Reading

Henry W. Johnstone, Jr., *The Problem of the Self*, pp. 133–150.

"Judgment," in Thomas O. Sloane, ed., *Encyclopedia of Rhetoric*, pp. 409–412.

Supplementary Reading

Douglas Ehninger, "Argument as Method: Its Nature, Its Limitations, and Its Uses," in William L. Benoit, Dale Hample, and Pamela J. Benoit, eds., *Readings in Argumentation*, pp. 145–159.

J. W. Patterson and David Zarefsky, *Contemporary Debate*, pp. 309–325.

David Zarefsky, "Argument as Hypothesis Testing," in David A. Thomas and Jack P. Hart, eds., *Advanced Debate: Readings in Theory, Practice, and Teaching,* 4th ed., pp. 252–262.

Questions to Consider

1. If argumentation is a way of knowing, and truth is relative to argument, can there be any fixed principles or unchanging standards? What are the implications of answering this question either positively or negatively?

2. For argumentation to function as a democratic instrument, must the public sphere (discussed in the previous lecture) already be healthy and robust? How can training and practice in argumentation contribute to the strength of the public sphere?

Glossary

A fortiori: argument suggesting that what is true of the lesser is true of the greater, or vice versa.

Ad hominem: argument against the person; usually regarded as a fallacy if it replaces substantive argument with personal attack but sometimes an appropriate criticism of another person's character, bias, or inconsistency.

Ambiguity: a condition in which a word could be used with multiple meanings and it is not clear from the context of the argument which meaning is intended.

Amphiboly: a condition in which a phrase or clause could be used with multiple meanings and it is not clear from the context of the argument which meaning is intended.

Amplitude: the number and range of arguments assembled to support a claim; the greater the number and diversity of arguments, the greater the amplitude.

Analogy: an inference based on resemblances: things that are alike in most respects are probably alike in the respect in question.

Antecedent: the "if" clause in an "if-then" conditional statement.

Bandwagon effect: accepting or rejecting a claim not on the basis of its merits but simply on the basis that many others are doing so.

Begging the question: assuming in an argument something that actually requires proof.

Burden of proof: the ultimate responsibility to demonstrate that a claim or resolution is probably true.

Burden of rejoinder: the responsibility to continue the argument after a plausible initial case has been made for or against the resolution.

Case: the structure of arguments developed to support or to oppose the resolution.

Categorical: a form of the syllogism in which statements relate categories to other categories; the relation is either inclusion or exclusion.

Cause: an inference that one factor somehow exerts influence on another; the inference not only asserts a predictable relationship between the factors but also accounts for it.

Circular reasoning: repeating in the claim what is already stated in the evidence, with the result that there is no inference or progression in the argument.

Claim: the statement of fact, definition, value, or policy that an arguer asks the audience to accept.

Classification: reasoning by example, in which the move is from a general statement to a specific claim.

Coalescent argumentation: argumentation in which the goal is to maximize the interests of both parties rather than to produce a winner and a loser.

Commonplaces: general beliefs or values that are widely shared within a culture.

Composition, fallacy of: the assumption that what is true of each of the parts is necessarily true of the whole.

Condensation symbols: symbols, such as a national flag, that embody (or "condense") a wide range of emotions or connotations; people will share a positive or negative reaction to the symbol although they will have very different reasons for doing so.

Conditional: a form of the syllogism that begins with an "if-then" statement, either affirms or denies the "if" or the "then" clause, and reaches some conclusion about the other clause.

Consequent: the "then" clause in an "if-then" conditional statement.

Controversy: a genuine disagreement between people that matters to them and that they wish to resolve.

Convergent: an organizational pattern in which a group of independent claims, taken together, supports the resolution or in which a group of independent pieces of evidence, taken together, support the claim.

Correlation: a measure of the predictable relationship between two factors, of the degree to which the presence of one predicts the presence of the other, or to which change in one predicts change in the other.

Credibility: the believability of a source; the product of competence, trustworthiness, good will, and dynamism as these are understood by the audience.

Critical discussion: an interpersonal argument in which both parties want to resolve rather than merely settle the dispute, each has an equal opportunity to influence the other, both want to resolve the dispute on the merits rather than by reference to extraneous factors, and there are no artificial constraints on their ability to resolve the dispute.

Deduction: reasoning in which the claim follows necessarily and automatically from the evidence and contains no new information not present at least implicitly in the evidence.

Dialectic: a process of discovering and testing knowledge through questions and answers.

Dilemma: an argument in which one presumably is confronted with an exhaustive set of possibilities, all of which are undesirable yet one of which must be selected.

Disjunctive: form of the syllogism that begins with an "either-or" statement, affirms or denies one of the options, and makes a claim about the other.

Dissociation: the breaking of a previously unitary term or concept into two separate ideas, one of which is more positively valued than the other, then identifying one's own argument with the more positively valued term.

Distribution: a property of terms in a categorical syllogism; a term is distributed if the statement containing it refers to every member of the category that the term designates.

Division, fallacy of: the assumption that what is true of the whole is necessarily true of each of the parts.

End terms: the terms in a categorical syllogism that appear in one premise as well as in the conclusion.

Enthymeme: a structure of reasoning in which one or more of the premises is drawn (often implicitly) from the beliefs of a particular audience; the argument is valid for that specific audience; sometimes described as a rhetorical syllogism.

Equivocation: the shifting of the meaning or sense of a term in the course of the argument.

Essentially contested concepts: concepts that gain their meaning or significance only in opposition to other concepts.

Evidence: statements that are offered in support of a claim.

Example: an inference that relates parts and wholes: that what is true of one is probably true of the other; *also* a type of evidence that consists of specific instances of a more general claim.

Fallacy: conventionally understood as an argument that appears to be valid but is not; sometimes used loosely to refer to any deficiency in an argument; more specifically, identifies deficiencies in form or (according to some theorists) in procedure.

False dilemma: a purported dilemma in which the alternatives are not exhaustive (there are other unmentioned possibilities) or in which they are not all undesirable.

Figurative analogy: an analogy that asserts a similiarity in the relationships among things, events, places, and so on, rather than among the items themselves.

Formal reasoning: reasoning in which claims follow from evidence purely as a matter of form, so that content and context are irrelevant; often equated with deduction, mathematical reasoning, and/or symbolic logic.

Generalization: inference from example in which the movement is from specific evidence to a general claim.

Hasty generalization: a generalization made on the basis of an insufficient number of examples.

Heap: the argument that, because each increment of something will be of no consequence, no amount of increment can be of consequence and a "critical mass" cannot be achieved.

Induction: reasoning in which the claim follows from the evidence only with some degree of probability and in which the claim contains new information not present in the evidence.

Inference: a mental move from evidence to a claim so that one accepts the claim on the basis of the evidence.

Informal reasoning: reasoning that is not purely a matter of form; in which content and context cannot be ignored.

Issue: a question that is inherent in the resolution and vital to its success; an argument that must be established in order to establish the claim contained in the resolution.

Literal analogy: an analogy that is a direct comparison of objects, events, places, and so on, starting with the knowledge that they are basically alike and inferring that they are probably alike in the respect under consideration.

Logic: structures of reasoning, whether formal or informal; the concern is with the relationships among statements rather than the relationships between statements and audiences.

Middle term: the term in a categorical syllogism that appears in the premises but not in the conclusion.

Mini-max principle: a guideline for strategic choices in attack and defense: one should make those choices that, with minimum effort and risk, yield the maximum gain.

Mixed controversy: a controversy in which the participants are committed to defending opposing claims and in which, therefore, each participant assumes a burden of proof.

Multiple controversy: a controversy in which more than one claim is advanced at the same time.

Narrative: an inference from the coherence of elements in a story or plot line.

Non sequitur: an argument in which the claim has no conceivable relationship to the evidence and does not follow from it.

Objective data: evidence that can be independently established or verified and to which it is widely agreed.

Parallel: an organizational structure in which each claim independently establishes the resolution, or each piece of evidence independently establishes the claim.

Personal sphere: the sphere of argument in which disputes concern only the participants and are resolved by them; typically, argumentation is private and ephemeral.

Persuasive definition: a definition that changes the denotation of a term while retaining the positive or negative connotation.

Phoros: the pair of terms in a figurative analogy that is better known; the relationship between them will be used to infer a similar relationship between the other two terms.

***Post hoc* fallacy**: the assumption that because one event followed another, the first somehow caused the second.

Presence: salience, importance, conscious awareness.

Presumption: a descriptive characteristic of the position that would prevail in the absence of argumentation; the arguer who does not hold presumption must present a case sufficiently compelling to outweigh it.

Prima facie: literally, "at first face"; a case that, on the surface, seems to satisfy the burden of proof unless something is said against it.

Proof: support for a claim; reasons to justify acceptance of a claim; not to be confused with scientific demonstration or mathematical certainty.

Public sphere: the sphere of argument that is of general interest to people in their capacity as citizens and in which everyone is eligible to participate.

Red herring: irrelevant material that may be introduced into an argument to distract or to deflect attention.

Reductio ad absurdum: method of refutation that suggests the other arguer's position leads to unacceptable implications.

Refutation: the process of criticizing, attacking, or responding to an argument; sometimes the term is also used to embrace the process of defending, rebuilding, or extending an argument after it has been attacked or criticized.

Resolution: the ultimate claim that an advocate seeks to prove or disprove; the substance of a controversy; a declarative statement that responds to the central question in a controversy.

Rhetoric: study of the ways messages influence people; the faculty of discovering the available means of persuasion in a given case.

Self-sealing: an argument that cannot be tested or falsified because its warrant accounts for all possibilities, even those that seemingly would disconfirm the claim.

Series: an organizational structure in which each claim or piece of evidence leads to the next; only at the end of the chain is there reached the resolution or claim in question.

Sign: an inference from the predictable relationship between factors; the presence of one predicts the presence of the other; or change in one predicts change in the other.

Single controversy: a controversy in which only one claim is involved; the claim is advanced by one participant and doubted by the other.

Slippery slope: an argument that suggests that a seemingly trivial or inconsequential action will start an irreversible chain of events leading to catastrophe.

Social knowledge: the conventional wisdom or common judgment of a society that is accepted and acted on as true.

Sphere: a metaphorical arena for argumentation in which a distinctive set of accumulated expectations defines the context and the range of persons eligible to participate.

Stasis*:* the focal point of a controversy; the question on which the controversy turns; the "point of rest" at which the force of an assertion is countered by the force of a denial.

Straw man: an answer to an argument that has not been advanced and that is not germane to the matter under discussion.

Syllogism: a standard structure of reasoning that contains two premises and a conclusion; the premises are the evidence, and the conclusion is the claim; the conclusion is derived from the premises.

Technical sphere: the sphere of argument in which controversy takes place in specialized fields, is governed by the conventions of the field, and is accessible to people in the field.

Theme: the pair of terms in a figurative analogy about which the conclusion will be drawn; the relationship between the terms in the other, well-known pair will be used to infer a relationship between the terms in this pair.

Topoi*:* literally, "places"; categories of issues that typically arise in resolutions of a given type.

Unmixed controversy: a controversy in which only one participant commits to defending a claim and assuming a burden of proof; the other party casts doubt on that claim but does not advance a competing claim.

Vagueness: the property of a term that is of indeterminate meaning or that has multiple meanings, but the meaning intended in the case at hand cannot be determined.

Validity: in formal reasoning, a condition in which, if the evidence is true, the claim must be true (to have true evidence and a false claim would be contradictory); in informal reasoning, a content-neutral test of the soundness or compelling nature of a claim.

Warrant: an authorization or license to make the inference from evidence to claim.

Biographical Notes

Aristotle (384–322 B.C.E.) Wrote a systematic treatise on the art of rhetoric, which he defined as the faculty of discovering the available means of persuasion in a given case. Identified forms of argument and genres of appeal.

Descartes, Renè (1596–1650). Philosopher who used systematic doubt to find the basis of knowledge in self-evident statements. Cartesian logic regards only formal deduction as acceptable reasoning.

Eemeren, Frans H. van. (1946–). Professor of argumentation studies at the University of Amsterdam. One of the founders and principal proponents of the pragma-dialectical approach to argument analysis.

Farrell, Thomas B. (1947–). Professor of Communication Studies, Northwestern University. Rhetorical critic and theorist of the public sphere; contemporary interpreter of Aristotle. Introduced the concept of *social knowledge* to designate a community's storehouse of conventional wisdom that is accepted as true.

Goodnight, G. Thomas (1948–). Professor of Communication in the Annenberg School for Communication, University of Southern California. Postulated controversy as the basic defining unit of argumentation; described the liberal and the conservative presumptions in argument; distinguished among the personal, technical, and public spheres of argument.

Gorgias (c. A.D. 483–c. 376 B.C.E.). Sophist who developed and taught figures of speech and stylistic variation, although not in a systematic fashion.

Grice, H. P. (1915–1988). A philosopher of language who analyzed ordinary conversations and developed normative principles for language use that are implicitly understood by the participants in a successful exchange.

Grootendorst, Rob (1943–2000). Professor of argumentation studies at the University of Amsterdam; one of the co-developers of the pragma-dialectical approach to argumentation studies.

Habermas, Jürgen (1929–). German social theorist who has described the transformation of the public sphere from its 18th-century ideal to an increasingly bureaucratized and technical forum.

Hamblin, C. L. (1922–1985). Australian philosopher who challenged conventional views of fallacies by suggesting that they should be seen as units of discourse that were not fallacious in all circumstances.

Isocrates (436–338 B.C.E.). A Sophist who taught by modeling examples of outstanding practice rather than by formal precept; a leading antagonist of Plato.

Lippmann, Walter (1889–1974). Journalist, theorist, and critic of politics and society. Argued in the 1920s that the public was not competent to make judgments about policy; qualified this view during the 1950s by maintaining that it was possible to cultivate a "public philosophy."

Mill, John Stuart (1806–1873). English utilitarian philosopher; developed systems for inferring causation that are the basis for most social science research.

O'Keefe, Daniel J. (1950–). Professor of Communication Studies, Northwestern University. Called attention to two separate perspectives on argumentation, as both product (text) and process (interaction) with different methods and objectives of study for each.

Peirce, Charles Sanders (1839–1914). American pragmatist philosopher who maintained that there were four principal ways of knowing: tenacity, authority, correspondence with *a priori* beliefs, and verification (the scientific method).

Perelman, Chaim (1922–1984). Belgian philosopher of jurisprudence; together with Mme. L. Olbrechts-Tyteca, developed a system of rhetoric in which argument is the fundamental unit; introduced such concepts as presence, dissociation, and the universal audience.

Plato (c. 428–347 B.C.E.). Philosopher who attacked the Sophists and assumed that their excesses were inherent in their practice; distinguished rhetoric (concerned with appearances) from philosophy (concerned with truth).

Protagoras (c. 445 B.C.E.). Sophist who often is regarded as the "father of debate" because he taught that every question has two sides and that "man is the measure of all things."

Ramus, Peter (1515–1572). Dutch philosopher who refigured the relationship between philosophy and rhetoric by regarding invention and arrangement as part of philosophy and logic, leaving rhetoric with only style and delivery.

Stevenson, Charles L. (1908–1979). Philosopher of language who introduced the concept of the persuasive definition, which transfers positive or negative connotation from one denotation to another.

Toulmin, Stephen (1922–). British philosopher who has held several academic appointments in the United States; theorized that formal logic is an inappropriate prototype for argumentation and developed a model of argument as an alternative to the syllogism.

Walton, Douglas N. (1942–). Professor of Philosophy at the University of Winnipeg. Engaged in a systematic study of the fallacies to determine more precisely the conditions under which they may be valid arguments.

Whately, Richard (1787–1863). Archbishop of Dublin; developed a theory of presumption that he applied to every existing institution on the grounds that change is not a good in itself.

Willard, Charles Arthur (1945–). Leading proponent of the view that argumentation should be seen primarily as a type of interaction in which persons maintain what they construe to be incompatible positions; has written extensively on argument fields and the need for interfield borrowing of discourse.

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